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## A TRIP TO THE NORTHWEST BY AUTOMOBILE

## TOURING

# Yellowstone Park \& Glacier Park 

CAMPING AND

FISHING
ON THE WAY

By HENRY KLUSSMAN<br>TOLEDO, OH!O

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The long, long trail is calling you. Don't you hear it whispering from every vagrant breeze? Don't you feel it tugging at your heartstrings and surging through your blood? Don't you know it leads' to where the Red Gods call? Of course you do, and you rebound to heed the call, for the lure of the great open spaces predominates in the innermost recesses of your heart.

The call of the trail is a real call. Throw off the impediments of civilization. Motor out to the West. Throw out your chest and breathe the pure invigorating air. Enjoy the coolness of summer breezes among forest, lake and stream. Look across green valleys to rugged mountain peaks, where mountain sheep pick their nim-ble-footed way among the sky-land trails. If you are a persistent fisherman, cast your fly upon the sparkling waters, myriads of mountain trout await your rod.

Smoke your pipe and rest-just rest and relax. It gives you health, hope and courage, and puts you in harmony with nature.



Copyright by Fred H. Kises Swift Current Trail, Glacier National Park.

## PREFACE.

The material for this article was gathered while on an auto-camping trip during the summer of 1921 , covering approximately 7,000 miles, to the State of Washington and return, with side trips to Yellowstone National Park, Glacier National Park and other points of interest.

The purpose has been to inform the auto-tourist planning this trip, about the road conditions, camping grounds, proper equipment to be taken along, and the scenic attractions to ke found on the way, hoping it will prove of interest and assistance.

Auto-camping has come to stay. It has solved the economics of vacationing. Each year sees scores of thousands of motorists taking it up and finding it the door to a richer, happier and healthier life.

With a tent you can camp in the heart of the wilds, when and where you like, with the same comfort and satisfaction you enjoy in your home. It gets you away from the "daily grind" and gives your tired, overworked, unstrung nerves a rest, bringing you back with new pep and enthusiasm.

The auto-camper is absolutely independent of hotels with their excessive charges, to say nothing of garage expenses.

It is perfect folly for an American to go to Europe in search of landscape beauty or of Nature's wonders until he has first seen that of his own country.

Americans by the thousand annually visit Europe to climb the Alps, to scale the Matterhorn, to view the beauties of the Rhine, to visit the Pyramids of Egypt, and to kask in the sunshine of Italy, seemingly unaware that their own country contains attractions of mountain and glacier; forest, lake and stream; geyser and hotspring; sunshine and scenic beauty far surpassing those across the sea.

We invite tourists to visit Yellowstone National Park and Glacier National Park, and we defy them to cite a spot on earth that will compare with them.

And to see your country, to gain any conception of its immensity, resources and grandeur of scenery, there is no way so effectual as to visit it with an automobile.

## THE AUTO CAMPERS' EQUIPMENT

In extensive tours it is very essential that the auto-camper be properly equipped, but only that should be taken which is absolutely necessary. Whether you take your equipment for camping on the car, or pull it behind in a trailer is merely a matter of opinion, but the fact remains that approximately 98 per cent of tourists carry their outfit on the car.

The trailer may become a source of danger on the steep narrow mountain grades, switch-backs, hairpin turns, and in backing up. It is quite expensive, compels you to drag about five hundred pounds of excess weight, and cuts down your daily mileage.

In the selection of equipment, two things are of prime importance,-space and weight. After having made a previous trans-continental tour and many camping trips in the Northwest, where we at one time resided, and inspecting the various outfits used by thousands of tourists, we believe our present outfit compares very favorably with the best, and especially so for a party of five persons, which we carried. Our Haynes touring car was equipped with an outfit as follows:

An, auto-tent made of balloon silk, with steel pegs and light cedar poles weighing thirty-two pounds.

This was a tourist tent $12 \times 71 / 2$ feet, absolutely waterproof and large enough to contain two double and one single air beds, and still leave sufficient space to comfortably get around in. It had a bobbinet lace screen win-
dow with adjustable storm flap. The fly of the tent goes over the car and fastens on the opposite side so as to completely enclose the tonneau. The rear wall is 3 feet high. Only four light cedar poles are necessary, the two forward poles being jointed to save space in packing. The car can be used as a dressing room.

The tent has a sod-cloth which turns in, and on this a separate ground cloth is laid, which can be taken up at any time and laundered. This makes the tent snake and insect-proof. It is carried in a balloon silk bag on the running board.

The two double air beds complete with blankets weighed thirty pounds each, while the single air bed with blankets weighed twenty pounds, or a total of eighty pounds.

The air beds are lined with felt and are inclosed within the sleeping pocket, which is absolutely waterproof and also lined with felt inside. There is extra material at the head for protection against rain, if you should desire to sleep in the open without a tent.

Having used folding cots on previous occasions, we decided to try the Metropolitan Air Beds on this trip. For pure comfort of body and protection against cold, I will never autocamp again without an air bed. The folding cot is much colder to sleep on, the cold seemingly coming from beneath.

While camping in Yellowstone Nat:onal Park in July, 1921, we slept com-
fortably, while many who slept on folding cots nearly froze, even though they had an abundance of blankets. . In the Yellowstone National Park during the summer, nights are usually very cold.
A pump is supplied, with which to inflate the bed, but the average lung capacity can do it just as easily, or the pump on your engine may be used.

The bed should be inflated just sufficiently to hold the weight of the body comfortably and prevent it touching the ground. There is no rolling whatever.

Therefore, the air bed is a prime essential to the success of any autocamping trip, and more especially on trips through the Rockies, or in cold weath $r$.
'The double air bed rolls into a bundle 42 inches long and 12 inches in diameter, depending for size on the number of blankets rolled with it. The single bed rolls into a bundle 26 inches long and 12 inches in diameter. To keep mud and dust off, they are wrapped in waterproof khaki and strapped to the running board or carried on the running board inside adjustable luggage carriers, just as you prefer.

A two-burner gasoline Auto Kamp Kook Stove is indispensable. We have used one on innumerable occasions, and can highly recommend it as the most efficient means of getting up a auick meal. It is about the size of a small suit case, folds up, and has a carrying handle. It weighs $81 / 2$ pounds.

One of the most important parts of the equipment is a refrigerator basket. In it you carry ice cream, milk, butter, meat and drinks and keen them cool and fresh at all times. They come in various sizes-ours was 21 inches lone, 10 inches wide and 12 inches high. It
can be replenished with ice whenever necessary. It is carried on the running board, weight 10 pounds.
Extra wool blankets and clothing should be wrapped in an Auto Blanket Roll made of waterproof khaki and secured with straps. A duffle bag should be carried along, in which are packed the cooking utensils, first-aid kit, hand axe with sheath, soap, towels, folding canvas wash basin and bucket, light rubber waders, bulk food, etc. Camera, binoculars and thermo bottles are carried inside the car.

An electric light with extension cord to fasten to dash socket, for camp illumination, will also come in handy. A flash light should also be taken along. Goggles for the protection of the eyes against the glare of the sun add to the pleasure of the trip.

We also were equipped with a roll-top lunch table. It weighs only 10 pounds and has a size of $31 \times 31$ inches. It rolls up in a bundle 31 inches long and 6 inches in diameter. Two suit cases carried in the car will take care of other things needed on the trip. The total weight of the whole equipment, together with extra clothing, amounts to approximately 225 pounds.

The cooking utensils should consist of aluminum, cups without handles that fit within each other, plates, coffee pot and two skillets with detachable handles, and one kettle-all of which fit together in compact space.

Of course you must not forget your fishing rod and tackle, as it will afford you much sport.

Clothing should be selected with great care. For both men and women: riding breeches or those built on the lines of the soldier's breeches are best. The Duxbak outing breeches are excellent, they are double at the seat and
knee, are durable and comfortable. The legs lace in front from ankle to knee, and leggings or puttees with ordinary lace shoes, or wool socks and high-top boots should be worn.

A khaki wool shirt is worn with the breeches. For girls a middy blouse may answer the purpose.

For the coat we prefer the Norfolk Duxbak Jacket for both men and women, which is purposely made to wear with the riding breeches of the same make. It has a belt, and roomy pockets are located almost everywhere.

A cap or hat to match completes the outfit. The ladies should be careful not to take high-heeled shoes on the trip. A wool sweater for each member of the party is most essential, and Mackinaw coats also will be found comfortable in the Rockies.

Each person should have at least three union suits, one of which should be heavy wool. Light wool socks also should be taken along. Whatever you do, don't take your best clothes on an auto-camping trip. Leave them at home where they belong.

After traveling westward from Chicago, you will find 75 per cent of the tourists dressed in khaki shirt and breeches, both men and women alike. You see them on the streets of every town and city, in high-class cafes and in motion picture theatres during the traveling season. You will find every facility to keep clean and comfortable, as free tourist camps are scattered all over the West. They are found in every city and village and many are eauipped with every convenience, such as shower baths, laundry, kitchen, and electric lights.

Plan your work in making and breaking camp. Let each person have certain work allotted to him and do his share. When breaking camp, always see that the weight is evenly distribut-
ed and that everything has its proper place. Select your camp site for the night in plenty of time. If a tourist camp is not in the immediate vicinity, stop in a school yard, or some convenient place on the roadside. In several states the law provides that school yards, and even buildings, are property of the public, and under the meaning and intent of the law it is perfectly right to pitch your tent here. Here, also, is to be found a pump and usually good drinking water.

After the place has been selected, two or three persons in the party, all co-ordinated in tasks to do, can put up the tent, inflate the air beds, and get things in a homelike condition in about thirty minutes.

If you are planning on tonring the great stretches of the Northwest, where the "going" is heavy and the grades steep, be sure your brakes are in good shape. Before starting see that your motor is in good condition. If necessary, have the carbon removed, valves reground, and motor tuned up Replenish the oil in the crankcase, differential, and transmission and grease the wheels. The extra inflated tire you carry on the rim and one extra tube, together with patches, cement and one shoe and boot, will be found sufficient for the trip. The idea is to keep the weight down. There are garages and gasoline service stations to be found at short intervals along the route, and it is unnecessary for you to burden yourself with too much stuff. The usual tool equipment that comes with the car, and a pair of chains. should be taken along. A good spotlight and a contrivance to keep the windshield free from rain while driving, are very important. Strap fasteners bolted to the running board, or adjustable luggage carriers, complete the equipment.

## THE AUTO-CAMPING TRIP

Early on the morning of June 15th, 1921, we left Toledo, Ohio, traveling westward toward the land of the "setting sun." The route passed through Wauseon, Bryan, and South Bend to Chicago.
Seven miles east of Valparaiso, Indiana, we drove ints a school yard and pitched our tent. This was our first camp, and it took but a few minutes to get everything in comfortable shape for the night. While we were at dinner, a light truck, on fire, rumbled past, going down the road with a load of chicken. People suddenly seemed to appear from every direction, many chasing it, while others, yelling and gesticulating, tried to intercept. it, and finally succeeded in halting the driver. As luck would have it, we had a small fire extinguisher with us. The fre, 'which had caught from the muffier, was soon extinguished, not much damage having been done. After thanking us properly the driver continued on his way.

We resumed our dinner, and then, being slightly tired, crawled into bed.
The next morning, after a refreshing sleep and a good breakfast, we broke camp, packing everything in its proper place, and started for Valparaiso. Here we replenished our gas and oil, paying 22.2 cents per gallon for gasoline. We found gasoline cheaper in Valparaiso and Chicago than anywhere else on the trip. The price runs all the way from 27 cents to 30 cents per gallon in the western part of South Dakcta to 31 cents at Livingston, 35 cents at Gardiner, 45 cents in Yellowstone Park, 50 cents in Glacier Park, and 27 cents at Spokane. Oil increases from 25 cents per quart in Indiana to 40 cents per quart in Montana.

We continued our drive of 50 miles to Chicago, entering the city by way of its magnificent boulevards, passing the South Shore Country Club, thence through Jackson Park and Washington Park, soon arriving on Michigan Boulevard, which we followed to Jackson Boulevard.

Starting at Jackson and Michigan Boulevards at 10:00 a. m. we traveled west on Jackson, curving to the right through Garfield Park and oit on Washington Boulevard to the end, a distance of 19.6 miles; left one block and west on Madison St., crossing the Des Plaines River into Maywood, then turned south on Fifth Ave., running onto Roosevelt Road. We traveled west on this concrete to Geneva, Illinois, where we picked up the Lincoln Highway. We followed this highway to Clinton, Iowa. The distance from Chicago to Clinton is 148 miles, over as fine a piece of concrete constructed road to be found anywhere in the country, passing through DeKalb, Dixon, Sterling and Fulton, Ilinois.

After leaving Chicago, it rained three consecutive times during the day. Shortly after the rain ceased we had to make a detour of one and one-half miles. It was over a newly constructed dirt road, soft and múddy, with short steep hills. It took us exactly one hour with the assistance of man-power, to plow through it, before again reaching the main highway. We all were muddy from head to foot.

At Fulton a long toll-bridge crosses the Mississippi River, connecting with Clinton. The charge was 40 cents. This bridge affords an excellent view of this well-known water course. We bought a few supplies in Clinton, and as the sun
was still high in the west, we drove 25 miles to the north of the city on the road to Dubuque, and for the second time pitched our camp in a school yard. We drove 230 miles during the day, besides passing through the congested traffic of Chicago, which we considered extremely good.

They maintain an excellent public camp ground in Clinton, but we decided to push on while the going was good.

During the next day we traveled over some very rough and hilly roads, passing through Dubuque on the way to Cedar Falls. Here we found a fine tourist camp situated in a beautiful grove, on the bank of the river. It has every facility for the camper, including water, shower-bath, stoves and firewood. They treat you with every courtesy and try to make your visit a pleasant one. Here we were informed that had we gone straight west from Clinton to Cedar Rapids, then north, we would have had excellent roads.

Nearly every city and village of the West has a free public camp ground, to accommodate automobile tourists, they having found out it is an asset to the community. The scores of thousands of tourists traveling the country, buy more or less of all the necessities of life, purchasing tires, gasoline and oil, having rewairs made and spending money for equipment. The probabilities are that between fifty million and one hundred million dollars were spent by eastern tourists west of the Mississippi during the touring season of 1921.

The following morning we continued our journey to St. Paul and Minneapolis over the Jefferson Highway, passing through Albert Lee, Owatonna and Faribault on the way, traveling 254 miles. The weather was beautiful and the road remarkably good. We reached St. Paul about 4:00 p. m., where we met some old-time friends who invited us to dinner. After a luxurious feed we
bid them good-bye. and drove across High Bridge, which spans the Mississippi, and camped at the tourist camp in Minnehaha Park in Minneapolis. Here they sure treat you with true western hospitality. The camp was just started this year and it is not completely equipped, although there is water, kitchen with range, and plenty of firewood. In 1922, when completely equipped with all modern conveniences, this will be
one of the loveliest camp grounds in the country. There is plenty of shade under the stately oak and maple trees, and the ground is covered with grass. Minnehaha Falls is only a hundred yards or more away and should be visited by the tourist.

Minneapolis is the great tourist center for westward travel, and they have come to realize that it pays to induce auto-campers to visit their beautiful city. Every attention and consideration is shown the tourist. Here, also, you meet tourists from the Pacific Coast, who give you authentic information regarding roads, together with the experiences through which they passed.

Minneapolis is a very progressivé, "up-to-date" city. Many beautiful drives and boulevards connect it with St. Paul, and both cities are surrounded with picturesque lakes and fine bathing resorts. If you have the time it will pay you to camp in these beautiful environments for a few days. St. Paul also maintains a splendid camp on Cherokee Heights, a short distance from the west end of High Bridge.

Two trails lead westward from Minneapolis. The National Parks Highway, the northern route, leads through St. Cloud, Fergus Falls, Fargo, Bismarck and Glendive, while the Yellowstone Trail, a little farther south passes through Ortonville. Aberdeen, Mobridge and Marmarth. Both highways converge at Fallon, Montana, then continue
over the same route all the way to Spokane, Washington, passing through Miles City, Billings, Livingston, Butte, Missoula, Superior, Wallace and Coeur d'Alene City. After getting what information we could from tourists, who had recently traveled over these two routes, we decided to go west over the Yellowstone Trail. For the first 40 miles, this well-marked trail leads through a typical lake country, skirting beautiful Lake Minnetonka at Excelsior, and a little farther west, Lake Wacona, one of the most picturesque lakes in the State.

Minnesota has the reputation of having 10,000 lakes within its borders. The majority of lakes are well stocked with black and small mouth bass, wall-eyed pike, pickerel, crappie and other freshwater fish. The lakes in the northern part of the State also have muskies. while the streams, afford good trout fishing.

Most of the lakes are surrounded by forests of pine, spruce and hard wood. There are numerous resorts and camps, and the bathing, boating and fishing facilities are unsurpassed.

Continuing westward from Waconia the trail passes through the great wheat belt, the richest agricultural section of the State. The road is maintained in splendid condition throughout the State and good time can be made.

We arrived at Ortonville at $5: 00 \mathrm{p} . \mathrm{m}$. and remained over night. Big Stone Lake, situated here, is a very popular summer resort and the fishing is excellent.

We put up the tent, had a fine dinner, and then my son and I went fishing. We asked the man from whom we rented the boat, what the best bait was for bass and he replied, "Frogs and minnows, but they take everything."

While my son handled the oars, I assembled my tackle, and decided to try
a "Yellow Tango" and "plug" for them. I was not disappointed in my selection. I cast several times along the shore midst the lily pads, and finally succeeded in getting a savage strike.
There is always a thrill when a fish strikes your lure, and especially so if he is a game fighter. I finally succeeded in landing a four-pound black bass. We continued along the shore and I managed to get two more, somewhat smaller in size. Having enough for a good breakfast in the morning, we quit and went to camp. We unanimously voted this a perfect day, and went to bed.

Yes! a perfect day, but the night was H-......! The mosquitoes pestered the life out of us. I never in all my experience saw so many at one time. Their attack was in mass formation, and against me in particular. I had scores of intensely itchy wheals covering my face, neck and hands. My face was so swollen I could hardly see. Having no Citronella Oil or other mosquito dope, I tried lubricating oil, which gave me some relief. We built a smudge in an old tip can and placed it in the tent for a while, then we closed the tent and went to bed. This proved quite satisfactory. It is advisable to have Citronella Oil in your equipment, as mosquitoes are plentiful, especially in Minnesota, eastern South Dakota, along the Yellowstone River and in Yellowstone Park.

In the morning we had a breakfast consisting of bacon, bass, bread and butter, and coffee. My! What appetites we had to enjoy it.

From Ortonville we crossed the state line, entering. South Dakota. From here to Ortley the road was nothing to brag about, but from there on to Mobridge it was excellent, and we averaged about 35 miles per hour. We passed through a country devoted largely to
live stock and agriculture. Fences and trees are beginning to vanish, and alkali water and sage-brush are making their appearance. Don't drink this water, whatever you do. Fill your waterbag or thermo-bottles in the towns along the route, where good water is always to be had, if you make inquiry.

We soon arrived in Mobridge, which is located on the Missouri River, 226 miles west of Ortonville. They have a camp ground in this town, but a more suitable place is to be found just across the river. We bought a few supplies, then started for the river, a distance of about two miles. Here we crossed on a ferry. The charge is $\$ 1.00$ for a car, and 10 cents for each passenger.
About a hundred yards from the ferry landing on the west bank, is a dandy camping place in a grove consisting of cottonwoods. Here also is a road-side inn that has accommodations for tourists if necessary, and can supply you with gasoline and oil.

From the Missouri River Ferry we followed a fine road for a distance of 38 miles to McLaughlin, passing through the Standing Rock Indian Reservation. A small thunder storm pursued us for quite a distance, but finally gave it up.

The old Bismarck-Deadwood Trail is crosed at Morristown. Over it bold


The Great Plains.
highwaymen, strange travelers and processions moved in by-gone days. If it could but talk, it would tell of many interesting adventures and thrilling escapes along its winding course.

Continuing westward, on every side the plains stretched seemingly limitless. At times there would be no object to break the horizon, then again through the clear air, with the aid of field glasses, we would get a glimpse of the advance guard of the Bad Lands.

We entered the southern part of the Bad Lands of North Dakota a few miles east of Marmarth. The Bad Lands look lonely and dreary and are absolutely devoid of vegetation. The formations are made up of sandstone, shale and clay, and erosion has carved the unequally resistant rock into fantastic shapes. There is no wood to be found here, and the few streams are dried up in the summer. Cloudbursts and freshets occur during the rainy season, but the water only remains for a couple of days, and everything becomes as dry as before.

Having traveled 226 miles during the day we decided to spend the night at Marmarth.

Here we were informed that a few days previously a terrible cloudburst had occurred west of the town, and that the bridges had been washed out. The tourists traveling west had been held up for four days, and none attempted to come through from Baker. All the bridges had been repaired with the exception of one about ten miles west of town. The County Commissioners had a man stationed there with two teams, to tow automobiles through the stream, so the next morning we decided to head for Baker.

About two miles west of Marmarth we got stuck in a deep mud-hole. Everybody got out, disgusted. After several ineffectual attempts to pull out, we backed the machine as far as possible, dug the mud from the wheels, and packed the hole with grass and small rock. With everybody in mud up to their knees, pushing with all their energy, I threw in the clutch, gave her the gas, and suddenly shot out on terra firma. At the same time Miss Wegman was precipitated headlong into the mud. She was a terrible sight, literally covered with the soft clayey mass. "My ! What shall I do?" exclaimed Miss Wegman, very much exasperated. "That's nothing," I replied, "wipe your face and hands as best you can, and leave the mud to dry on your clothes, it will come off easier later on."

When we arrived at the bridge, we found the man with the teams waiting. He hooked on and soon managed to pull us through the stream to the opposite bank and onto the road. From here the roads were exceedingly bad all the way to Baker. During the dry season the roads through the Bad Lands are usually fine.

From Baker, Montana, to Fallon, the road passes through a somewhat broken agricultural country but it is excellent. There are some hills but they are easily negotiated. At Fallon the Yellowstone Trail and National Parks Highway converge and pass over the same route westward following the Yellowstone River most of the way to Livingston.

We arrived in Miles City at about 5:00 p. m. and camped there for the night. The mosquitoes were very bad and we had to build a smudge in the tent before going to bed. The tourist camp is located in a grove of trees on the bank of the Tongue River. It has every modern convenience.

Miles City holds an annual Round-Up during the first part of July. This is a typical frontier show, where the cowboy, the broncho and the wild steer again come into their own. Several cities in Montana have a Round-Up during the summer months, and if you should be in the immediate vicinity at the time, it will pay you to attend one of them.

Between Miles City and Forsythe we had to make a bad detour of about ten miles, the serpentine road passing over short, steep hills, from which now and then we caught a glimpse of the Yellowstone River. There is considerable new construction being done throughout the State of Montana, and therefore there were numerous detours. The main highway should be in fine condition during the season of 1922.

We passed through Billings and stopped at Park City over night, having covered 188 miles during the day. l'his is a picturesque little town. The valley is irrigated and considerable alfalfa is raised. It appears like an oasis in a desert, compared to many of the towns we passed through in Montana. The tourist camp is situated in the town park, which has many lofty shade trees and velvety grass. Although not completely equipped, they promise in 1922 to have shower-baths, laundries and all modern conveniences.

Just to the south of Park City you get a fine view of the snow-capped peaks of the Bear Tooth Range, 50 miles away:

The following day we drove to Livingston. Here is a thriving, up-to-date, typical western city. It is situated in a valley, completely surrounded by towering mountains, and is the gateway to the "Wonderland of America"-Yellowstone Park.

We arrived in Livingston about 2:00 p. m. and here secured a first-class meal at one of the many good restaurants, bought some supplies, replenished our oil and gas, and started for Garfiner, situated at the northern entrance of the Park. The ride is 56 miles up
the wonderful Yellowstone Valley. We camped at the Public Camp Grounds at Gardiner, retired early and had a fine sleep.

The next morning we entered the Park at 8:30 a. m.


## YELLOWSTONE NATIONAL PARK

The Yellowstone National Park outranks by far any similar volcanic area in the world. It contains more geysers than are to be found in the rest of the world together.

Here are canyons whose volcanic sides, by decomposition of their minerals, have assumed most brilliant and beautifully blended colors. Here are lakes that mirror the clouds, and reflect the forests on their shores. Here are streams that wind and linger, and babbling brooks that race on forever. Here are geysers, prismatic pools, hot springs and bubbling paint pots each with its own attractive setting. Here are petrified forests with trunks standing. Here is the largest and best game preserve in North America, the animals of which are comparatively fearless and some even friendly. Here is the Yellowstone River with its spectacular waterfalls and its colorful, awe-inspiring canyon. Here are beautiful valleys carpeted with myriad colored wild-flowers. Here if one loves nature, and desires to see the processes of world construction, he can see it in all its sublimity. Indeed, the Park offers an exceptional field for nature study.

As a National Park, it was created by an act of Congress March 1st, 1872. and has been ever since the wonder spot of America.

The Park lies in the recesses of the Rocky Mountains in northwestern Wyoming. It slightly overlaps Montana on the north and Idaho on the west. It is rectangular, with an entrance about the middle of each side. Its boundaries embrace an area of more than 3,000 square miles. It occupies a high plateau averaging more than 8,000 feet elevation, surrounded by high mountains, waterfalls and cascades. The Absarokas bound the east, their crest invad-
ing the Park at Mt. Chittenden. The Gallatin Range penetrates the northwestern corner from the north. The Continental Divide crosses the southwestern corner over the lofty Madison Plateau and the ridge south of Yellowstone Lake. The largest mountain, Electric Peak, (11,555 feet elevation) is situated in the northwest corner of the Park.

The Yellowstone Plateau is a vast lava deposit. The material is mostly volcanic, but its landscape-its architecture, is largely glacial.

Volcanoes in remote ages, in and near the Park threw forth enormous quantities of lavas, ashes and cinders which built up the plateau region three or four thousand feet thick. Rhyolite and other forms of lava were last spread over the surface. This volcanic activity appears to have ended before the last ice age. The ice age wrought vast changes in the volcanic landscape. The ice smoothed wide areas, carved canyons and rounded mountain sides.

The places of scenic interest generally visited are Mammoth Hot Springs, the Norris Geyser Basin, Lower and Upper Geyser Basin, Yellowstone Lake and the Grand Canyon of the Yellowstone River. All these points lie on the main circular road system that is traversed hy automobiles. There are many other points of interest, however, which can be reached by hiking, horseback, or by means of packtrain outflts. The Park season extends from June 20th to September 15th.

Hotels are operated at Mammoth Hot Springs, Upper Geyser Basin, Yellowstone Lake and the Grand Canyon. Public Auto Camp Grounds are located at Mammoth Hot Springs, Old Faith-
ful Inn, Lake Hotel, Canyon Junction and at Tower Fall Junction. At the hotels and camps, visitors can supply themselves with fishing tackle, upon
payment of a small rental. Here also may be had horses and guides if you prefer to visit the more inaccessible places in the Park.

From the Lincoln Highway, the Park may be reached by two routes: on the east from Cheyenne, Wyoming, and on the west from Ogden, Utah.

The route from Cheyenne passes through Chugwater, Wheatland, Casper, Thermopolis, Basis, and Cody to the eastern entrance, the total distance being 541 miles.

From Ogden the route leads through Pocatello and Idaho Falls to Yellowstone, Montana, the western entrance, the distance being 324 miles.

From the Yellowstone Trail the Park may be reached from Billings via Cody to eastern entrance, a distance of 175 miles; or Livingston to Gardiner, the northern entrance, 56 miles; or Butte to Yellowstone, western entrance, 170 miles.

Automobiles in the Park are required to travel around the road system forming the "loop" in the direction opposite to that of the hands of a clock, except under hour regulations. Inquiry should be made for reverse directions.

At Gardiner, the north entrance, we drove under an impressive stone arch bearing the inscription "Yellowstone National Park, Created by Act of Congress, March 1st, 1872, for the Benefit and Enjoyment of the People." It was built in 1903 by the Government and was dedicated by President Roosevelt. Just inside the entrance a permit must be secured at the ranger station, which entitles you to operate your automobile over the roads in the Park. The fee is $\$ 7.50$. You will have to satisfy
the ranger that your brakes and tires are in good order, and that you have sufficient gasoline to reach the next gas station. He will also seal your gun, if you happen to carry one.

A drive of about four and a half miles up the Gardiner Canyon brings us to Mammoth Hot Springs, the first center of scenic interest.

## MAMMOTH HOT SPRINGS.

Here are located the famous terraces, the Mammoth Hotel, the abandoned army post of Fort Yellowstone, and the headquarters of the Park Supervisor. The terraces are immediately solith of the hotel. The principal ones are Hymen, Pulpit, Jupiter, Angel, Cleopatra, and Orange Spring. Near the southwest end of Angel Terrace is the Devil's Kitchen-a cave which may be visited. Another peculiar rock formation beyond the Devil's Kitchen is the mass of travertine-calcium carbonate-known as the White Elephant Mound.

As one proceeds over the sedimentencrusted coating separating these terraces from each other, he feels that only the thinnest shell intervenes between him and the very center of the earth. Here, waters heavily charged with lime, dissolved from limestione beds below and brought to the surface by the hot springs, are quickly precipitated forming tier upon tier of white terraces, which are beautifully colored in various tints of red, pink, brown, yellow and occasional streaks of green, by the algae which clings closely to the travertine formation in a velvet-like covering, and requires hot or tepid water in which to live. The water-filled basins on the terraces are magnificently carved and fretted, some being draped in front with clustering stalactites. When the springs dry up, they leave mounds of chalk-white formation. The colors are present only on active terraces. When a spring changes its

course, the new basin formed soon becomes brilliantly colored by the algaeladen water, the abandoned portion changing to a lifeless white.

While the deposits here are chiefly lime, those of the geysers and other hot springs in the Park are chiefly silica, also deposited largely by the algae. The two kinds of deposits differ greatly The Mammoth Hot Springs' deposits are soft and crumbly; the silica deposits of the geysers are hard as flint. Without this hardness, the geyser ac-
great blocks of limestone, in the midst of which are located the Hoodoo Rocks,
curiously misshapen and fantastically carved by erosion, lying as though some god, in sport, had tipped them over. Beyond this is the Golden Gate, one of the most picturesque drives in the Park. After passing a multitude of interesting attractions we soon arrived at Obsidian Cliff, about 12 miles south of Mammoth Hot Springs.

Obsidian Cliff rises nearly 250 feet


Golden Gate and Viaduct, Yellowstone National Park.
tion would be impossible, as the lime formation would not withstand the explosive violence.

The formation of Old Faithful grows very slowly, imperceptibly: Even now, after thousands,-possibly millions,of years, its mound is but a few feet above the valley.

Leaving Mammoth Hot Springs, we climbed a steep grade passing between
above the road, on the left-hand side, and is a vast mass of volcanic glass, glistening in the sunlight. The greater portion of this mineral glass is black, rather like anthracite in appearance, with here and there streaks of red and yellow. Hot lava hurled from volcanic vents or gushing from cracks in the earth's crust, if cooled quickly, results in glass; if less quickly, in glass mixed with crystals; if slowly enough all becomes crystalline like granite. So, in
forming this cliff the lava must have cooled suddenly. The volcanic glass of this cliff is analogous to common glass, which is a silicate of potash, soda or other base, except that manufactured glass is relatively free from iron and other coloring substances which abound in the lavas, rendering them dark and more or less opaque. Lavas, too, are usually mixtures of several silicates, while manufactured glass consists of only one or at most a few. The glass of this cliff is in vertical columns of pentagonal-shaped blocks. Here also is probably the only piece of glassconstructed road in the world. The river runs at its foot, and to build a roadway was quite a problem. The glass was too hard to be drilled for blasting, and Colonel Norris, the engineer, broke it into fragments by first heating it with fires along its surface and then throwing cold water on it.

Just beyond is Roaring Mountain with an enormous steam vent at the top, that can be heard for a mile.

These examples of volcanic action increase as we continue our drive through the Norris Geyser Basin, Lower and Upper Geyser Basin. Everywhere are boiling springs, mud volcanoes, and geysers, too numerous to describe, steaming, pulsating and spouting in their beautiful basins, displaying an exuberance of color, and calculate 1 to surprise and frighten by their hissing, booming and throbbing noises.

## THE GEYSERS *

A geyser may be defined as a periodically erupting hot spring. Were the heat sufficient and the tube long enough all hot springs would erupt. The geysers vary considerably in character and action. Some erupt at irregular intervals of days or weeks, while others, like Old Faithful, play at more or less regular intervals. The small ones play

[^0]every few minutes. The water is generaly thrown vertically, though some is shot through tubes that lie at an angle. The quantity of water hurled into the air varies from a few gallons in small geysers to thousands of barrels in the larger ones, at each eruption.

The highest stream is thrown by the Giant, which has a maximum of 250 feet, for a period of one hour, every six to fourteen days. This is the highest geyser in the world. It hurls aloft an enormous volume of water, with a fury that is appalling. This geyser action is picturesque and wierd. It appeals to the imagination.

Old Faithful, is in most respects the most wonderful geyser in the Park. It is very popular because of the regularity of its eruption, which takes place at intervals of seventy minutes. It plays for four minutes, and projects its water to a height of from 125 to 170 feet. It gives ample warning before each play, beginning with a few spasmodic spurts, then gradually rising to its maximum. At the first warning, the tourists hurriedly gather around, but when the tremendous outburst begins, all retreat to a safe distance, and look on, awe-stricken and silent with reverent wonder.

The Paint Pots are curiosities. They are craters or irregular-shaped basins in the earth, filled to the rim with highly colored thick, hot mud, that resembles paint. There is a continuous throbbing and bubbling as the steam escapes through it. The most important is the Mammoth Paint Pot with its basin measuring $40 \times 60$ feet in size. It has a mud rim five feet high.

Here also are prismatic pools that repose in basins, whose rims are formed of minerals-mostly silica deposited by the algae-laden water. All are picturesque and beautiful. Prismatic Lake is the largest. It has a circum-


## THE MOST IMPORTANT GEYSERS AND SPRINGS ARE LISTED BELOW

NORRIS BASIN


LOWER BASIN


UPPER BASIN

| NAME | Helght of Eruption in Feet | Length of Eruption | Intervals between Eruptions |
| :---: | :---: | :---: | :---: |
| Artemisia | 50 2 | 10 to 15 minutes | 24 to 30 hours |
| Beehive | 200 | 6 to 8 minutes | 12 hours |
| Castle | 50-75 | 30 minuteis | Irregular |
| Dalsy | 70 | 3 minutes | 80 to 90 minutes |
| Fan | 15-25 | 10 minutes | Irregular |
| Giant | 200-250 | 1 hour | 6 to 14 days |
| Giantess | 150-200 | 12 to 36 hours | 10 to 20 days |
| Grand | 200 | 15 to 30 minutes | 10 to 12 hours |
| Grotto | 20-30 | Varies | 2 to 5 hours |
| Jewel | 5-20 | 1 minute | 5 minutes |
| Lioness | 80-600 | 2 to 4 minutes | Irregular |
| Mortar | 30 | 4 to 6 minutes | Irregular |
| Oblong | 20-40 | 7 minutes | 8 to 15 hours. |
| Old Faithful | 120-170 | 4 minutes | 60 to 80 minutes |
| Riverside | 80-100 | 15 minutes | 6 to 7 hours |
| Sawmill | 20-35 | 1 to 3 hours | Irregular. |
| Spasmodic | 4 | 20 to 60 minutes | Irregular |
| Turban | 20-40 | $10^{\circ} \mathrm{min}$. to 3 hrs . | Irregular |

NOTABLE SPRINGS
Black Sand, Chinaman, Emerald Pool, Morning Glory, Punch Bowl, Sponge, Sunset Lake.
ference of 300 yards, and is more like a lake than a spring. The water is pure deep blue in the center, fading to green on the edges, and its basin and terraced slopes are astonishingly bright and varied in color. The temperature of the water is about 146 degrees Fahrenheit.

Morning Glory Spring is also a very unusual spring, with its symmetrical conformation and funnel-like crater. The walls are delicately colored, and the water a transparent blue. It has the appearance of a gigantic morning glory set in the earth.

Several days might well be spent roaming among these geysers and springs, observing the varied phenomena.

In the trees directly back of Old Faithful Inn is located the Public Auto Camp Ground, where you may pitch your tent free of charge. Many hikes and horseback trips to points of interest can be made by trail from the hotel.

The drive to Yellowstone Lake is over a wonderful winding hill, one of the engineering feats of the Park. Yellowstone Lake lies 7,741 feet above sea level. It is the largest body of water in the world at that altitude, with the exception of Lake Titicaca, Peru. It has an irregular shore line of a hundred miles and an area of 139 square miles. Several islands dot the surface of this beautiful sheet of ice-cold water. The terraces surrounding its shores show that at the close of the glacial period its surface was about 180 feet higher than it is at present, and its area was nearly twice as great. The outlet formerly was by way of the Snake River to the Pacific Ocean. The Continental Divide then passed over the summit of Mt. Washburn. The change may have been caused by earthquakes. upheaval or by subsidence. The probabilities are that ice dammed the narrow gorge of Outlook Creek, through
which the water of the lake formerly flowed to the Snake River. Whatever the cause, its outlet waters changed, and eroded the now famous and splendidly colored canyon of the Yellowstone River.

At the Lake Hotel the tourist is almost sure to see bears. They usually come down out of the forest in the late afternoon and evening to feast on the garbage thrown out from the kitchen. They are so tame that they may be approached with impunity, at least near enough to be photographed.

It is advisable to spend a day or two in this vicinity and enjoy the varied attractions. A launch trip should be taken on the Lake. It will be found very interesting.

There is excellent fishing in the Lake. One of the most popular places to catch fish, is from Fishing Bridge which spans the Yellowstone River a short distance from the Lake outlet. The Government Fish Hatchery is located on the lake shore, a short distance from the Lake Hotel, and is well worthy a visit.

From the Lake we drove to the Grand Canyon of the Yellowstone.

This alone, without the geysers, would have warranted the reservation of so striking a region for a National Park.

The Yellowstone River issues from the north end of Yellowstone Lake in a broad, smooth, stately current, stilently flowing on for about 15 miles. Then suddenly it increases speed, rushes wildly and goes thundering over the Upper Falls, making a drop of 109 feet to the shelving rock at the bottom of the abyss. Then it rushes in wild fury for a short distance, being compressed between the perpendicular rocks from a width of 200 feet between the Upper and Lower Falls, to less than 100 feet when it takes a sheer leap of 308 feet


Copyright by Haynes, 'St. Paul
The Woman Bear, Yellowstone National Park.
into the Canyon below, where it goes foaming on its way.

The Canyon is gorgeously startling and impressive. Its precipitous walls are comparatively free from vegetation, and are broken with pinnacles and jagged ridges. : The Canyon is approximately 20 miles long, but it is only the first 3 miles below the Lower Falls that carry the wonderful colors. At bright noonday the walls are adorned with all the colors of a rainbow.

Robert Stirling Yard in his "Book of the National Parks" writes about the Canyon: "Those who have seen all the other leading features of the world's great natural phenomena, agree that here all seem to have been brought together and thrown over the edge of that chasni, into the abyss in one glorious confusion of enchantmient. Nos one, whether artist, cameraman or writer, has been able to adequately portray or describe this Canyon." The Canyon measures 2,000 foct from rim to rim, and narrows down to 200 feet at the river. while the depth is 1,200 feet. If the Canyon is to be viewed from the northern rim a high steel bridge is crossed over Cascade Creek. At the north end of the bridge a path leads to the right down the edge of the gulch, passing Crystal Falls, and leading to the top of the Lower Falls. Near the Grand Canyon Hotel is a stairway leading down to the Lower Falls. The Canyon and Lower Falls, however, are seen to the best advantage from Inspiration Point at the end of this road, and from Artists' Point across the Canyon. Artists' Point is the spot from which Moran painted his great nicture now hanging in the National Capitol. Free anto camn grounds are located iust north of the Upper Falls near Canyon Junction.

The Glacial Boulder nassed on the left-hand side of the road, on the drive to Inspiration Point. shows the great transporting power of the glaciers. It is granite and measures $24 \times 20 \times 18$
feet. It was transplanted to this resting place from mountains more than thirty miles away. The peaks of the mountains surrounding the Park are a mass of granite, and the few granite boulders found in the Park were shaped transformed and brought here by glacal ice. The boulder reposes on rhyolite and other products of volcanism three or four thousand feet thick.

From Canyon Junction we continued north to Tower Fall Junction. About six miles north of the Grand Canyon Hotel, the left or main traveled road, which is the usual route in bad weather, goes by way of Dunraven Pass. We chose the right-hand road, which leads over the summit of Mt. Washburn, altitude 10,000 feet. It is the highest and steepest auto road in the Park. Be sure your radiator is full of water before starting as it will surely boil. It is advisable to have your brakes in good condition, and be sure to use compression on the descent on the north side, to prevent the brakes from overheating. The descent is about 10 miles to Tower Fall Junction.

The wonderful panorama to be had from Mt. Washburn will amply repay vou for your trouble. While descending this mountain in 1917, during a visit to the Park, our car skidded for 200 feet on the moist road, and to say it was thr lling is to put it mildly.

## PETRIFIED TREES

A petrified tree is situated one-half mile south of the main road, about one mile west of Tower Fall Junction. Some petrified wood is also found in the northwest corner of the park.

The fossil forests cover an extensive area in the northeastern part of the park, being especially abundant on the ridges south and west of Lamar River. The most accessible forest is found on Specimen Ridge about six miles southeast of Camp Roosevelt, and may be conveniently reached by a side trip on horseback.


Copyright by Haynes, St. Paul
Great Falls (Close up) Yellowstone National Park.

. View in Yellowstone National Park.


Petrified Tree.


Grand Canyon of Yellowstone River.

If you have a couple of days to spare you might visit Amethyst Mountain, about twelve miles due southeast of Camp Roosevelt, passing the Buffalo Farm on the way. The last few miles are by trail. Horses and guides can be obtained at Camp Roosevelt.


View in Yellowstone National Park.
On the northeast slope of Amethyst Mountain, erosion has exposed the petrified remains of thirteen ancient forests in layers, one on top of the other, buried at different periods of volcanic outpourings.

In bygone centuries, the lowest of these forests was entombed by a volcanic outburst of mud, ashes and cinders which prostrated many trees, broke off limbs and completely buried trees standing where they grew. On top of this volcanic deposit with its completely buried trees, a new forest grew and flourished. But the volcanoes only slept. Later, when the trees were once more in their glory, volcanic fires again broke forth filling the sky with their products, and again the forest was doomed. Thirteen consecutive times were great forests here smothered, each in a layer by itself, and each time new forests grew on top of the buried ones. The summit was raised 2,000 feet by the products of these numerous volcanic activities. On top of this mountain the pines and spruces of today are merrily growing, unmindful of the tragic tree history beneath. Waters highly laden with silica circulated through the
buried trunks and stumps and petrified them, changing the wood to quartz crystals. In due time the mud and ashes that buried the trees also turned to stone. So perfect is the petrification that the worm holes and leaves are preserved with absolute fidelity. The annular rings, from which one tells the age of the trees, are clearer and more easily counted than those of living trees, and these indicate for the large trees an age of not less than five hundred years. Some of the stumps are fully ten feet in diameter, and one redwood discovered measures $261 / 2$ feet in circumference and its age is estimated at several thousand years. The lower slopes of the mountain are covered with fragments displaying beautiful crystals of agate, jasper, chrysoprase and amethyst. In many cases, the species of trees are readily determined. More than eighty kinds have been differentiated, including redwoods, laurels, pines, buckthorn, sycamore, oaks, and also trees that today only grow in southern climates.


Grand Canyon of Yellowstone River.
How long it took each growth to reach maturity; how long it flourished afterward before destruction; and how long the several lava flows suspended vegetable growth, are matters largely conjectural.

## GRASSHOPPER GLACIER

Just outside the northeast corner of the Park, in the Beartooth National Forest, is Cook City, Montana, a quaint
little mining town. The town is surrounded by some of the most imposing mountains in this region, and radiating from it are numerous trails which can be followed on horseback.

Pilot Peak and Index Peak, a short distance to the southeast, are remarkable for their perpendicular castellated crests. The chief attraction in this vicinity is Grasshopper Glacier, situated about twelve miles north of Cook City. It is an immense mass of snow and ice located high up on the shoulder of Glacier Peak. It was so named because of the fact that the stratified remains of millions of grasshoppers are embedded in the ice, where the insects were caught by a snowstorm, in prehistoric times, during a flight across the pass. It covers an area of nearly five square miles at the head of Rosebud Canyon. Cook City is thirty-eight miles from Camp Roosevelt and can be reached by auto; from there saddle horses must be used, and the last mile and a half is made on foot through broken rock up a steep slope, where horses can not be taken.

## WILD ANIMAL SANCTUARY

The Yellowstone National Park is undoubtedly the largest and most wonderful game preserve in the world. With the exception of Mountain Lions and Coyotes, all animals that inhabit this region are protected in every possible way. Free from molestation by the hunter, they have become comparatively fearless.

Elk, deer, antelope, moose, bear and mountain sheep roam the park at will, in large numbers. The National Park Service Officials estimate that there are between 15,000 and 20,000 elk in the Park. The buffalo in the Park, at one time, were nearly exterminated. In 1896 when protection laws were passed, the original stock had been reduced by hunters to about 25 individuals. Since then. the government has added to the

Park stock, buffalo purchased out of of the Flathead Lake and Texas Panhandle herds. At the present time they have increased to about 600 .

The "show" herd can be seen by the tourist at Mammoth Hot Springs, where they are kept in an enclosure. The "tame" herd of several hundred, are supposed to be at the Buffalo Ranch east of Tower Falls, but more probably in the hills beyond the Lamar River, where a hike by trail may be necessary to see them. A "wild" herd grazes near the headwaters of Pelican Creek, and another in the Beckler River Meadows in the southwest corner of the Park.

Antelope can often be seen near Gardiner and elk and deer as well as bear are generally seen from the roadside, by the tourist, while driving over the main highway of the Park. Big Horn Mountain Sheep frequent the high bluffs overlooking Gardiner Canyon at the northern part of the Park, while moose graze undisturbed in the pastures in the Beckler River country, and also in the northeastern part of the Park.

Bears frequent the vicinity of the hotels and camps, because they have come to recognize the garbage thrown out from the kitchens as their special source of food supply. Throughout the summer months they visit the hotels in large numbers, usually apearing in the late afternoon or evening. They are quite harmless so long as they are not teased or molested. It is a very interesting sight to watch them feeding. The bears of the Park are mostly black bear, but sometimes their coloring shades off to brown and the uninformed call them cinnamon, but they belong to the same species. The nose of the black bear is always brown. In one litter there often are found cubs, both black and brown. The grizzly is ocasionally seen. He is of powerful prorortions and has grizzly gray hair,
often tipped with white, when he is known as a Silver Tip. The black bear is a good tree climber, whereas, with the exception of the cub, the grizzly is unable to climb.

While traveling near the Lake Hotel
spruce and climbed to the topmost branches. It sat there forty feet from the ground and watched us. I know of nothing more cunning or more attractive, than a cub roosting in a tree. He hung his little fat stomach over a


Cub Bear in Tree, Yellowstone National Park.
we saw our first bears in the Park. A bear followed by a cub, walked across the road a short distance ahead of us. I. stopped the machine, got my camera and photographed them. While changing the film, the cub took to a nearby
branch and looked down at me, with his little ears cocked and his head turned to one side, as much as to say, "I decline your invitation to come down." I got a good snapshot, as the accompanying picture will prove.

One evening while camping in the Park we had an unexpected guest for supper. A full-grown black bear came to the camp, in a friendly manner, coaxing for something to eat. We gave it some scraps and a half loaf of bread, which it seemed to relish immensely. After it had finished the bread the bear ambled off into the woods, but soon returned, bringing with him four others of his kind. We felt quite flattered at
seizing two loaves of bread, part of a ham and the sack containing all our cooking utensils and made off into the pines, doubtlessly planning to establish a kitchen of their own. Of course, it is needless to say, we were very much shocked as well as frightened to think they would do such an ungrateful thing. However, we decided to let them have anything they thought necessary to their comfort. In the morning we


Mother Bear and Cub, Yellowstone National Park.
this unexpected honor, and proceeded to feed them most bountifully. After supper the bears were loath to leave, manifesting their gratitude by hanging around all night, compelling us to remain awake and entertain them. We felt quite uneasy towards the last. The bears not receiving proper attention in the way of food, became disgruntled, got into the car and helped themselves,
found all our utensils a short distance from the camp, scattered in various directions. Truly! this is the way of the bear.

A good many of the animals leave the Park boundaries during the fall and winter months, and are killed by the hunters outside. When they drift over the line, the rangers of the United States Forest Service and State Game

Wardens take up the work of protecting these animals from would-be poachers and tooth hunters.

From Tower Falls Junction to Mammoth, there is nothing particularly interesting, especially after one has seen so much. At the top of the ridge we saw Electric Peak in the distance ahead, while to the left is Bunsen's Peak and to our right, Mt. Everts. This is a superb view. It takes in the valley of the Gardiner River and the Yellowstone.

We passed through Mammoth Hot Springs and soon reached Gardiner, leaving the Park behind us. Alas! How hard it was to leave it. We promised we would some day see it again-we said "Au Revior but not good-bye"
But remember this, don't be in too much of a hurry; take plenty of time, you may never visit the place again, although you promise to do so.

We returned to Livingston, and continued our journey westward, passing through Bozeman, Three Forks and Whitehall on the way to Butte. West of Livingston the arrows of the trailmark point east. After passing Bozeman and traversing the Gallatin Valley, you will notice at Three Forks, where the Gallatin, Madison and Jefferson Rivers converge to form the mighty Missouri. All along the route the scenery is very attractive.

We stopped at Whitehall over night, early in the morning starting for Butte.

Soon the foothills merge gradually into the steeper mountains. You make a gradual, almost imperceptible climb for a distance of 20 miles, until 15 miles east of Butte you cross the Continental Divide of the Rockies, through Pipestone Pass, one of the most attractive drives in this part of the state, at an elevation of 6,950 feet. The winding descent. leading west into Butte, is quite steep and compression should be
utilized, thereby saving the brakes. It may, at times, be advisable to shift to intermediate gear. In Butte are located the world famous copper mines, to which the city owes its prosperity. Many side trips, of interest to the tourist, are available. Roosevelt Drive, Limestone Hill and Brown's Gulch are especially recommended for their scenic beauty. There is also excellent fishing in the immediate vicinity.

We traveled to Missoula by way of Deer Lodge, Drummond and the Canyon of "Hell Gate" River, arriving there at $3: 00 \mathrm{p}$. m. Missoula is the metropolis of Western Montana, and the gateway through which all overland travelers across Montana must pass. Hellgate Canyon is the only pass through the mountains between the Canadian Border and Southern Idaho. Missoula is the hub of five productive valleys: the Bitter Root, Flathead, Blackfoot, Hellgate and Missoula. Here you find a splendid camp ground just outside the city limits, situated in a large pine grove. Rattle Snake Creek, which flows through the camp grounds, emptying in the Missoula Rivert is well stocked with cut-throat and brook trout. By going a short distance up this stream one can readily catch the limit. Just east of the city at the entrance of Hellgate Canyon on Mount Sentinel, is a mammoth letter " M " consisting of rock painted white, symbolizing Missoula. In this city we met some old acquaintances, who invited us to dinner, and what a wonderful dinner it was! We sure had appetites to enjoy it.

We started early the following morning, hoping to make the distance of 183 miles to Coeur d'Alene City. A few miles east of Sunerior we encountered two deer standing in the road. They seemed absolutely unconcerned at our presence, seemingly contesting the right of way. We honked our horn and threw rock at them, after which they loped off into the forest.

Approaching the Bitter Root Divide some fairly steep grades are negotiated.

After passing through St. Regis and Saltese, the last ten miles of the road to Summit, where you cross the Bitter Root Mountains through Lookout Pass at an elevation of 4,727 feet, was very bad and extremely steep. At the summit we came to a hair-pin turn called a "Switch Back". This is a terribly dangerous place. STOP! Back your
yon a thousand feet deep. As you coast along sharp curves for quite a distance, you suddenly come out in the open and just ahead of you is Mullan. Seven miles beyond is Wallace. the center of the Cocur d'Alene mining district. Here is situated the Bunker Hill and Sullivan Mine, the largest silver-lead mine in the world in production and profits.

We followed the Cocur d'Alene River through Kellogg to Cataldo, then


The Switch-back, at Summit of Lookout Pass, Idaho-Montana State Line.
car carefully! Here you will appreciate good brakes, and thank your stars you have no trailer in the way. From the summit you shut off your engine and coast all the way into Wallace, a distance of 16 miles. Use your compression and take plenty of time. The canyon is impregnated with the fumes of burnt brake linings.

For the first few miles the trail follows the forest-covered mountain from whose sides trickle many springs of pure ice-cold water. At the opposite side of the road is a deep wooded can-
branching to the right from the stream we passed through the famous Fourth-of-July Canyon, traveling for miles through virgin forests of pine and tamarack. With Coeur d'Alene fifteen miles ahead, the road continued winding around curve after curve, mounting higher and higher on the very edge of the mountain. To our left was a precipitous drop of hundreds of feet to the shores of Lake Coeur d'Alene dancing and sparkling for miles in the sunlight. Several glimpses of the lake are to be had as we travel this winding trail, and at last emerging from the timber
we gradually descend until the lake lies shimmering at our feet, closely hugging its shores until we arrive in Coeur d'Alene City.

We chartered a launch at Coeur


ST. REGIS RIVER, MONTANA.
trailing vines and deep scented ferns together with fragrant wild flowers flourish in the glens of the forest-covered hills that gradually slope upward


FOURTH OF JULY CANYON, IDAHO.


Serpentine Road west of St. Regis, Montana.
d'Alene, unloaded our equipment into the boat, stored our car at the garage and started up the lake to Del Cardo Bay, where we have a cottage nestling in the trees on the shore of this picturesque body of water.

The Bay is situated in a small amphitheatre which is a perfect symphony of foliage, beach and water. Red berries,
towards the west. Here we spent several weeks of the most delightful time ever experienced, renewing old acquaintances, bathing, boating and fishing.

Having formerly resided in Spokane, we made several trips to that city from Coeur d'Alene while encamped on the lake. The drive is 34 miles, mostly over a fine cement road, skirting here and
there along the Spokane River by way of "The Apple Way", so named from its borders of fruit bearing trees.

Spokane is the metropolis of the "Inland Empire", having a population of one hundred and fifteen thousand. The city has wide streets, splendid schools, office buildings, stores, and wonderful parks and boulevards, besides having one of the most wonderful hotels in the country-Davenport Hotel. The Spokane River passes through the heart of the city where it has a series of picturesque cascades. Grain and fruit farming, lumbering, mining, shipping and manufacturing form the essential industries of the "Inland Empire" and Spokane is the hub.

Within a few hours' ride from the city are numerous lakes and streams abundantly stocked with fish. The surrounding country also has many game birds, such as quail, hungarian partridge, native pheasant, grouse, brilliantly colored chinese pheasant, prairie chicken, and ducks.

Spokane has one of the finest and most modern camp grounds in the country. It is called "The Highbridge Tourist Camp" and is located at Hang-
man Creek on the west side of the city. As this article goes to press, it is reported that during the season of 1922 all motorists stopping at the camp will be charged a nominal fee of fifty cents per day for parking privileges. The tourist camp has been laid out similar to a city, with lots and blocks where tourists will be allowed to pick their camp. Every person must register. The make of every car will be placed on record as well as the number of the engine. After making application for entrance into camp each car is tagged. With the charge goes the use of the camp, fire wood, hot and cold water, a wash rack for automobiles, laundry tubs, shower baths, toilet facilities, police protection, and general information about the city. The Inland Automobile Association expects to have a man on duty practically all day at the camp to furnish road information for all desiring it. Making a charge for parking services is new to Spokane, but observation has taught that tourists prefer to pay a small fee for camping facilities when every attempt is made to provide for their comfort, than to stop in a free camp that is filthy and lacking in facilities for cooking and bathing.

## EASTWARD BOUND

On the morning of August 13th, 1921, after having spent a very pleasant vacation of several weeks on Lake Coeur d'Alene, we started on our eastward journey. The boat arrived at $7: 45 \mathrm{a} . \mathrm{m}$. and we soon loaded our equipment on board. Then we regretfully bid farewell to the many friends who gathered at the landing to see us off. As the boat headed around the rocky point shutting out the last view of the cottage and glorious bay, we gave one last longing look and said "au revoir but not good bye", 'because we surely will go back. We are inclined to be sentimental, having sweet, wholesome, tender memories of Del Cardo Bay, but we try as best we can to hide our emotions. We soon arrived at Coeur d'Alene, where we packed the equipment on the car, bought supplies, oil and gasoline, and started on our drive through the Fourth-of-July Canyon, passing through Wallace, thence up the steep grade over the mountains through Lookout Pass. The rustling leaves and darkening sky gave warning of an approaching storm, and by the time we arrived at the bottom of the grade on the east side, it started to rain in torrents. We stopped until the rain subsided and then continued on our way until just a few miles west of St. Regis, where we remained over night, camping near a stream. We passed ten cars during the day bearing Ohio licenses, and two physicians with their families from Toledo shared the camp with us. The following day we arrived in Missoula early in the afternoon.

Here, once more. we were royally entertained by our friends, who insisted we remain to dinner. And the dinner! It began with tomato soup; then trout, fried chicken, potatoes, salad. corn, camembert cheese, ice cream, cake and coffee-and a touch, you know, just a
touch, of that nectar that makes the blood flow faster, and makes you sit up and take notice. This dinner was prepared with such skill and forethought for our enjoyment, that we will always remember it with gratitude.

We then drove to the camp grounds and you may be sure our sleep was long and deep that night. In the morning we started north to Glacier National Park.

Automobile tourists traveling on the Yellowstone Trail may reach Belton, the western entrance to Glacier Park, from Missoula, Montana. The total distance is 167 miles, the route being by way of the Flathead Indian Reservation with its prosperous towns of Arlee, Ravalli, St. Ignatius, Polson and Kalispell. Good roads prevail throughout this section and the traveler may supply his needs at any of the towns along the way.
The Mission Mountain Range, on the right, along the foot of which we pass for miles, has no rival for beauty and grandeur. The road just north of Ravalli passes through the National Bison Range, where can be seen scores of buffalo roaming on the hills. Polson is at the south end of Flathead Lake, supposed to be the largest body of fresh water west of the Mississippi River. At Polson the tourist has the choice of three routes north: a good road on either shore of the lake or he may cross by steamer, shipping his auto to Somers at the north end of the lake. From there he has ten miles of good road to Kalispell, which is thirty-five miles from the entrance to Glacier Park.

For no particular reason we choose the road traversing the east side of Flathead Lake. The lake is dotted with islands, and surrounded twith forests
that grow to its very edge. We found many good camp-sites along the shore, and creeks of ice-cold water crossing the road at frequent intervals. On the drive we saw many covies of ring-necked pheasant. The State of Montana maintains a Game Preserve about twenty miles north of Polson.

A few miles north of this place we
camped for the night, on the shore of the lake. We gathered drift-wood and soon had a big camp fire going, then all went in bathing, and later to bed.

The next morning we proceeded to Kalispell, where we met some friends, had our machine overhauled and about noon left for Belton, entering the park at 2:30 p. m.

## GLACIER NATIONAL PARK

Here are the new Alps of the western world. Here is the last stand of the Rocky Mountain Sheep and Goat, that inhabit the sky-land trails. Here game is found in abundance-elk, deer, moose, black and grizzly bears, beaver and mountain lions: Here are trails that follow the old game trails leading up the mountain side, over snowfields and along the very edge of glaciers. Here in the cool shadowy depths of the forest, are transparent lakes and turbulent streams where trout are large and gamey. Here are alpine meadows carpeted with wild flowers that grow in great profusion and variety.

Here is a wonderful tumbled region possessing sixty glaciers, two hundred and fifty lakes, as many stately peaks and cirques, precipices four thousand feet high and valleys of corresponding depth, picturesque waterfalls, dense for-est-clad slopes and impressive mountain fastnesses, all of astonishing and rugged beauty.

The scenic beauty is absolutely unrivaled. It elevates, inspires, dignifies and renders serious all who come under its spell. Here nerves that have been tense for years, slowly relax. The call of the "wild" is a real call. Throw off the conventions and superfluities of civilization, go to Glacier Park and enjoy this wonderful scenery or, if you are a persistent fisherman, cast your fly upon the sparkling waters and match your skill against the finny tribe. The Park season extends from June 15th to Sept. 15th.

The Park is situated in Northwestern Montana and incloses more than fifteen hundred smuare miles of mountain magnificence. In ruggedness and spectacular scenery it undoubtedly surpasses the Alps, though geologically it is auite different. The Park extends from the

Canadian Border on the north to the Great Northern Railway on the south, and from the Blackfeet Indian Reservation on the east to the North Fork of the Flathead River on the west. It was created a National Park by act of Congress May 11th, 1910, to preserve for all time and for all generations its mountain beauties. At present, communication between the east and west sides, within the Park, can only be made by trails across passes over the Continental Divide. Although Congress approved the "Transmountain Road Project" and appropriated one hundred thousand dollars to start its construction in 1921, it will require about five years to complete, but each year's work will permit motorists to reach new points of scenic interest. It will cross the Park through Logan Pass, extending from the highway at St. Mary Lake on the east to Lake McDonald on the west, and will be approximately fifty miles long.

From the Continental Divide, which runs northwest and southeast through the Park, descend nineteen principal valleys, seven on the east side and twelve on the west. The west side valleys south of Lake McDonald are not at the present time sufficiently developed to be of tourist importance, but the valleys to the north-Camas Creek, Loging, Quartz Creek, Bowman and Kintla, are valleys of unsurpassed grandeur. At the present time they may be seen only by those who carry camp outfits and use pack-horses following the trails. On the east side are found TwoMedicine. Cut Bank, Red Eagle, St. Mary, Swift Current, Kennedy and Belly River Valleys. All these valleys have numerous lakes whose shores are covered with forests. At the head of these valleys are steep, rugged peaks, topped and decorated with glaciers, their rocky
precipices streaked with white ribbons of frothing water, which go tumbling a thousand feet or more below.

## WROUGHT IN SEDIMENTARY ROCK

The scenic features of Glacier Park is the result of the Lewis Overthrust Fault, combined with the erosive action of the glaciers of the dim past.

Scores of millions of years ago these lofty mountains of Glacier Park, were deposited as sand, mud and lime carbonate on the bottom of the sea, that
ed into rock, and all the time the forces continually kept pressing together and upward the rocky crust of the earth. At some stage of this process the range cracked along its crest, then the great overthrust followed. Side-pressure of inconceivable power forced upward the western edge of this crack and thrust it over the eastern edge. When it settled the western edge of this break overlapped the eastern edge ten to fifteen miles, and was thousands of feet high, extending along a front of forty miles.


Lake Josephine, Gould Mountain and Grinnell Glacier, Glacier National Park.
once covered what is now the northwest of this continent.

Eventually, as the earth's crust contracted, concerning whose cause many theories have lived and died, pressures from within caused a bulging in places, very much as the sides of an orange will bulge when squeezed. Under urge of the terrific pressure, the crust lifted, emerged and became land. Untold ages passed and the land gradually harden-

This thrusting of one edge up over the other is called faulting by geologists, and this particular fault is called the Lewis Overthrust.

We know nothing about the rock in the vast interior of the earth, called the primal Archean by geologists, but we do know a good deal about the rocks just above the Archean. The very lowest of the known rocks, and consequently the oldest, which are exposed
in Glacier Park, are called by geologists, the Algonkian. Since emerging from the ancient sea they have become hardened by pressure and by the formation of minerals in the minute interspaces cementing the mud and sand of the original rock until today the sandstones are turned to quartzites, the limestone hardened to a very resistant rock, and the shale into argillite. Of the rocks forming the mountains the limestones


SCENE IN GLACIER NATIONAL PARK.


TWO-MEDICINE LAKE, GLACIER PARK.
a layer of green shale 3,400 feet thick, called Appekunny Argillite. It weathers every possible shade of green. Above that lies 2,200 feet of Grinnell Argillite or red shale, which weathers every shade of dark red. Both these shales have a good deal of glistening white quartzite mixed with them.

Next above that is found more than 4,000 feet of Siyeh limestone. It is very


VIEW IN GLACIER NATIONAL PARK.


THE MORNING'S TOILET.
hard and massive, colored iron-gray, with an insistent flavor of yellow. Horizontally through the middle of this upper strata runs a dark, broad ribbon of diorite, a rock as hard as granite which once while molten, burst from below and spread a layer all over what was then the bottom of the sea. When this cooled and hardened, more limestone was deposited on top of it, hence the dark ribbon running through those lofty gray limestone precipices. Above all these colored strata, once lay anoth-


GLACIER PARK STATION, MONTANA.
er shale of very brilliant red. Fragments of this, which geologists call the Kintla formation, may be seen topping mountains here and there in the northern part of the Park.

On the east side of the park, can plainly be seen where the ancient Algonkian rock rests on top of rock, which have been identified by their fos-


HUNTING SAGE HENS.
sils as belonging to the much younger Cretaceous period. When these rocks were lifted high in the air, cracked, and one edge thrust violently over the other, they sagged in the middle. If a horizontal line were drawn straight across the park from east to west it would pass through the bottom of the Altyn limestone on the east and west boundaries; but in the middle of the park, where is located the basin of Flattop Mountain, it would pass through the top of the Siyeh limestone. Therefore it would cut diagonally through
the green and the red argillites on both sides of the Continental Divide. This is why the region appears so tumbled, twisted, and inextricably mixed. The basin of Flat-top Mountain is situated between the crests of the Livingston Range on the west and the Lewis Range on the east.

During the overthrusting, which may have taken a million of years, and during the millions of years since, the


HELL'S HALF-ACRE, POWDER RIVER, WYOMING.
frosts have chiseled and the rains have washed away the topmost layer, the accumulations of the ages from Algon-


MORNING EAGLE FALLS, GLACIER NATIONAL

PARK.
kian times down, leaving the Algonkian rocks wholly exposed. Not a sign remains today, except here and there perhaps a fragment of Cretaceous coal-all has been ground to powder and washed away by flood and stream to enrich the drainage basins of the Saskatchewan, Columbia and Mississippi. This was accomplished by three series of countless centuries of rainfall and frost, interspersed by a series of incalculable centuries of ice which descended from the north, the erosive action of which gouged deep furows, forming valleys, carved and chiseled the highly-colored rocks, and excavated deep cirques, separated from each other by narrow saw-tooth-edged walls. In many instances these walls are nearly perpendicular and rise one to four thousand feet above the floor of the basin.

The present glaciers are the diminutive remnants of the last ice age, and are still carving and cutting, but in a minor degree, as they did in the dim and misty past. The glaciers formed the lakes, one of the most attractive features of the park.

A permit for operating an automobile over the roads of the park is secured at the ranger station at the west entrance for fifty cents, while at the east entrance the fee is two dollars and fifty cents. After entering the park, we followed a wide, macadam road, built through a dense forest of lodge-pole pine, spruce and cedar to the foot of Lake McDonald, three miles north of Belton. Here is located the National Park Cabin Resort operated by a private concern, where $\log$ cabins can be rented at reasonable rates, by the day, week or month. Launch service is maintained between this point and the Lewis' Hotel and Resorts at the head of the lake.

After spending a few moments here we continued up the valley of the North Fork of the Flathead River. This road is not suitable for automobile travel be-
yond Christensen's Ranch, twenty miles from the foot of Lake McDonald, but each year the road is being gradually extended farther into the northwest part of the park.

On account of rain we were unable to travel farther than Cama's Creek, where we crossed the bridge and pitched camp for the night. Here we soon had a dandy camp-fire going, and later had a good feed of trout which I caught in the stream.

In Cama's Creek Valley are six exquisite lakes, all having fine trout fishing. The chain begins in a pocket gorge below Longfellow Peak and are connected with each other by streams.

The next morning we returned to Lake McDonald. On the way we observed two deer grazing on the roadside, looking mildly at us, seemingly unconcerned.

Here, for a fee of seventy-five cents, the launch will take you to the head of the lake, which should be visited by all means, this being the most accessible place to visit the beautiful scenery of the west side.

Lake McDonald (Altitude 3,144 feet) occupies the lower end of the McDonald Valley. It is nine miles long and one mile wide. Its greatest depth is approximately 387 feet. ' It has an irregular shore line heavily timbered, with a splendid grouping of mountains at the upper end, the principal ones being Mt. Vaught ( 8,840 feet) ; Mt. Brown ( 8,541 feet) ; and Cannon Mountain (8,000 feet). The highest peak in this region is Mt. Edwards, $(9,055$ feet). McDonald Creek empties into the upper end of the lake. Two miles up the trail of this creek is Paradise Canyon, a rocky gorge very narrow and deep, with some attractive waterfalls in it.

Avalanche Basin and Lake are a day's trip from Lewis' to the northeast, the distance being about nine miles. Avalanche Basin is perhaps the finest exam-
ple of a glacial cirque in the park. The lake with its forest-covered shores is hemmed in on all sides except the outlet by walls over 3,000 feet high. At the top of this wall is Sperry Glacier and the melting ice of the glacier spills over the precipice in a half-dozen torrential streams. The lake is elliptical, about a mile long and half as wide, and is a favorite place for anglers.

From Lewis' Hotel a trip can be made to Sperry Glacier, a distance of nine miles, by traveling the trail around the south side of Edwards Mountain and up
largest glacier in the park, having an area of three square miles. Its streams flow into the St. Mary River on the east side of the Continental Divide. This glacier is especially dangerous in the vicinity of the upper cascade. Visitors are not permitted to make explorations unless accompanied by competent guides and supplied with ropes, belts, alpenstocks and emergency equipment. The alpenstock is utilized to sound for blind crevasses, and in case a person breaks through the ice, the alpenstock is thrown across the crevass to prevent being precipitated to the bottom.


Hidden Lake, Glacier National Park.

Sprague Creek, to Sperry Glacier Chalets. Continuing east on this trail, takes you over Gunsight Pass to Going-to-the-Sun Chalets on the east side of the park.

Trout Lake, about eight miles west of the Hotel, is a favorite fishing place, and Snyder's Lake, four miles east, is another anglers' delight.

The most accessible glaciers in the park are Blackfeet, Sperry and Grinnell. Blackfeet Glacier is two miles by trail from Gunsight Lake. This is the

The trail to Sperry Glacier from the Sperry Chalets is very steep, and is a distance of about two miles. Horses should be used to the foot of the escarpment under the south rim of the glacier, the last mile of the journey being made on foot up the almost perpendicular wall of the mountain. It is easily accessible, and the chalet close at hand will enable one to spend several days, if he chooses, in studying the glacier.

To visit Grennell Glacier one takes
the trail from Many Glacier Hotel on Lake McDermott on the east side of the park, passing Lake Josephine and Lake Grinnell on the way. The distance is seven miles.

After spending a few days in the neighborhood of Lake McDonald we left for Belton. The Great Northern Railroad maintains a daily antomobile freight car service for shipment of automobiles from Belton to Glacier Park Station or vice-versa. The charge for this service is $\$ 15 \cdot 63$. Passenger fare

They are used as supporting pillars inside and out. Many of the logs are for-ty-two feet high and several measure five feet in diameter. The hotel is in two large units connected by a long roofed observation room. The lobby is the length of a city square and the ceiling reaches to the rafters. The walls are decorated with pelts and adorned with skulls to which the horns are still connected. The fireplace in the lobby is open on all sides, and covered only by an immense chimney let down from the center of the ceiling resem-


Glacier Park Hotel, Glacier National Park.
is approximately $\$ 1.75$. Runways are kept on hand to quickly load the car on the train. The distance from Belton to Glacier Park Station on the east side of the park, where the most beautiful scenery is to be found, is fifty-eight miles, the railroad crossing Marias Pass at an elevation of 5,215 feet.

The Glacier Park Hotel at the eastern entrance is a mammoth structure built of immense logs of Douglas fir, taken from the "Big Trees" of the northwest.
bling the time-approved wigwam. Several Indian tepees are squatted about the hotel grounds. There were many tourists here. Everything is quite informal and comfortable, a good many of the tourists, both men and women, being dressed in riding breeches or khaki outfits.

When our car arrived the next afternoon, we left this queer hotel, fashioned out of big timber. An hour's. ride, skirting Two-Medicine River, en-
abled us to penetrate the range at a point of supreme beauty and stand beside the chalet at the foot of Two-Medicine Lake. Here is a large body of water situated in a densely forested valley, from whose shores rises a panorama of mountains that takes the breath. Immediately to the right is Rising Wolf Mountain, with an elevation of 9,510 feet. To the southwest at the head of the lake is Mt. Rockwell ( 9,505 feet), flanked on one side by Mt. Helen and Pumpelly's Pillar, and on the
group of cirques. From St. Mary Chalets a steamer can be taken to Going-to-the-Sun Chalets, situated at the head of the lake. From here can be viewed titanic mountains of deep red argillite, grotesquely carved, surrounded by snowfields, hanging glaciers that glisten in the sun, and spires that merge into the sky.

Here also you may tramp the. flower carpeted and timber shadowed meadows, cruise the lake with a launch, or go


Lake St. Mary, Glacier National Park.
other by Mt. Grizzly. The colors of the rocks vary from blue to gold, silver, red or gray, according to the mood of the weather, and the reflection of the sun and sky. Appistoki Falls nearby is well worth a visit.

At Trick Falls on the road to TwoMedicine Chalets, the Two-Medicine River, situated in a wondrously forested glen, cataracts over a great lime-stone uplift known as the Lewis Overthrust.

After remaining here two days we next visited St. Mary Lake, situated in a valley at the head of which are a
over the high passes on horseback. The trails are of marvelous beauty, bordered with Indian fox grass, mountain daisies, yellow-dog tooth violets, clematis, syringa, blue bells, yellow columbine, blue larkspur and hundreds of other wild varieties. In fact, the whole region is an immense flower garden.

There are several passes connecting the east and west sides of the park, but only four are practical as crossing places, namely: Gunsight, Swiftcurrent, Logan and Brown Passes.

Gunsight Pass is the most celebra-


Gunsight Lake and Chalets, Glacier National Park.
ted. From the east it is reached by trail leading from Going-to-the-Sun Chalets at the head of St. Mary Lake, and by way of Piegan from Lake McDermott. At Gunsight Lake the trail starts up the steep slopes of Mt. Jackson toward Gunsight Pass. The view of Gunsight Pass from the foot of Gunsight Lake is one of the most stirring sights in the park. The immense glaciered uplift of Mt. Jackson on the south of the pass, the wild glistening white sides of Gunsight Mountain opposite, dropping to the upturned strata of red argillite at the water edge, the pass itself perched above the dark precipice at the head of the lake, the zigzag which the trail traverses up Jackson's perpendicular sides and its passage across mammoth snowfields situated high in the air, give a thrill long to be remembered. From the summit of the pass a panorama of exquisite beauty is unfolded. Two thousand feet below and towards the northeast is Gunsight Lake, while on the southwest side, touching the precipitous sides of the pass, is Lake Ellen Wilson, which is celebrated for its rare beauty.

Swinging along the shale-rock slopes above Lake Ellen Wilson and over the Lincoln Divide, the trail suddenly descends into a circular basin to the Sperry Glacier Chalets. From there it continues descending down the side of Mt. Edwards to Lake McDonald on the west side of the park. An easy trail of two miles from Gunsight Lake leads to Blackfeet Glacier, the largest in the park. It is practically a day's journey from Going-to-the-Sun Chalets to Sperry Glacier Chalets, where it is usually necessary to remain over night, continuing the trip of about three hours the following morning. Horses and guides may be obtained for the round trip at the rate of ten dollars for each person, if five or more make the trip together. This does not include provisions, hotel and chalet rates. Various combination trips can be made by
horses and guides, and many short trips can be made on foot in the park.

Leaving St. Mary Lake we traveled north to Lake McDermott, where the road abruptly ends. There is no question but what this is the scenic center of the park.

Lake McDermott is about a mile long, and quite narrow, and has an elevation of 4,861 feet. At the outlet of the lake is McDermott Falls, a series of cascades, where the tourist will delight to linger. The lake occupies a rock basin which the old glaciers scoured out in places where the rocks were slightly softer than they were lower down the valley near the outlet. The rock barrier that crosses at the outlet is composed of a limestone ledge which holds Lake McDermott in place. Some may suppose that this ledge was thrust up like a dike, but such is not the case. At the bottom of the fall the older rock lies on the much younger Cretaceous of the Plains. The lake assumes many colors, from vivid blue and steel blue to green, according to the whim of breeze, sky and sun, or with approaching storm clouds it may suddenly become a study in black and white. Here is located the Many Glacier Hotel, a mammoth structure built of native stones and timber hewed and sawed from adjacent forests of spruce and balsam.

Lake Josephine, immediately to the southwest of Lake McDermott, is one of the most picturesque lakes in the park, presenting a reflection of mountain, foliage, glacier and sky in their own coloring. Indeed! it looks like a mirror in an emerald setting, and its waters assume all the colors of a rainbow. A mile farther to the southwest is situated Lake Grinnell, at the foot of the tremendous precipice of Gould Mountain. At the upper end, three large cataracts discharge their waters from Grinnell Glacier down the steep slope
into the lake, with a deafening noise, presenting a beautiful sight. The lakes are connected with streams, are gla-cier-fed and abundantly stocked with trout.

Iceberg Lake lies in a beautiful amphitheatre about one-half mile in diameter, surrounded by a horseshoe of perpendicular walls from 2,500 to 3,000 feet high, a glacier situated in its innermost curve, a lake of miniature icebergs
moss. Field glases should be taken along. Here, also, are found myriads of wild flowers growing at the very edge of the glacier.

From the bridge at McDermott Falls near the Many Glaciers Hotel, you get an unbroken panorama of scenic beauty. To the left rises Mt. Allen, rugged, forest-covered to its Arctic-Alpine zone, with an elevation of 4,500 feet above the valley floor.


Many Glacier Hotel and Lake McDermott, Point Mountain (Center), Mt. Allen (Right), Glacier National Park.
floating in its center. This cirque was not built up from below, but, on the contrary, was gouged and cut out of the solid rock, from the top downward, by ice. At the outlet is a series of falls. The trail to Iceberg Lake is seven miles from Lake McDermott, and can be made with horses or on foot in a short space of time. It is situated on the north fork of Swift Current Creek. This is a good place to get a view of mountain goat and big horn sheep. They are frequently seen making their way along the ledges, feeding on the grass and

Next, to the southwest is Mount Gould with its bold escarpment of gray limestone banded with black diorite near the top. Then comes Grinnell Glacier, hanging glistening in the sun, high up on the Garden Wall-not forbidding and repellant-but inviting and friendly. The saw-tooth Garden Wall is just beyond, narrow and precipitous. The majestic mountain commanding the center of the picture is Mt. Grinnell that rises from the lakeside in an enormous pyramid, having multiferous colors. To the right of Grinnell Mountain is


Lake Josephine, Mt. Gould at left, Grinnell Glacier and Garden Wall, top center, Glacier National Park.

Swift Current Mountain, and the depression between these two is Swift Current Pass. Then farther to the right is Mt. Wilbur, another majestic pyramid, massively carved. To the right of that is a continuation of the Garden Wall, serrated deeply by the ages.

Mt. Henkel swings back upon your right bringing your vision nearly to the starting point. Now if you will turn around and look toward the east you will see the limitless lake-dotted plan, completing the scenic circle. Truly! it is a place to linger and dream away the idle hours. He who can ride or walk can visit mysterious and enchanting spots of extreme beauty.

The eaștern entrance of park can be reached by automobile over the "Na-
tional Park to Park Highway" leaving the Yellowstone Trail at Livingston, Montana, and traveling north through Ringling, White Sulphur Springs, Great Falls, Chouteau and Browning; or over the "Geyser to Glacier Road" passing through Three Forks, Boulder, Helena, Wolf Creek, Chouteau and Browning; or over the "Custer Battlefield Highway" from Omaha and Council Bluffs by way of Sioux Falls, Rapid City, S. D., Spearfish, Sheridan, Custer Battle Field, Billings, Roundup, Lewiston, Great Falls and Browning. An auto road called the "Roosevelt Highway" has been perfected through from Duluth by way of Grand Forks, Minot, Wolf Point, Havre and Browning, this being the most northern route across the country. Those leading from the Yellowstone Trail are considered the best.

## FISHING

The call of lake and stream always appeals to the primitive in man. Deep in the makeup of every man there is the memory of the old fishing hole. The same instinct which sent you as a barefooted boy, armed with a bent pin, a can full of worms, a piece of twine tied to a willow pole, to sit for hours on the bank of a stream flowing through the meadow and catch minnows or bullheads, is still with you.

Each year the number of sportsmen who seek the woods and streams by automobile grows larger. In recognition of this the State and County Highway departments are extending broad hard-surfaced roads through virgin forest fastnesses, up the slopes of mountains and over the passes-such roads as would compare more than favorably with many of the boulevard roads in eastern cities. The West has gained a reputation for its hospitality to the tourist. Rapidly this great region is becoming famous as a home of game fish, abundant and hard-fighting.

If you desire to angle for the finny tribe, don't pitch camp at the side of a beautiful swift-flowing stream, on the main traveled highway and expect to catch fish off the bridge. It can't be done. You will be disappointed. Remember, trout inhabit by preference the inaccessible places, the cool, swift streams of forest and mountain away from the beaten paths. A few of the excellent places where you may try your luck are as follows:

In Minnesota you will find a panorama of lakes, thousands of them, spread out before you-take your choice -they are abundantly stocked with fish. Going west across Minnesota, the Yellowstone Trail skirts the lake region of the south central part of the State, where the fishing is always good.

Just north of the town of Ortonville near the Minnesota-South Dakota state line is located Big Stone Lake, which is full of bass, pike, pickerel and crappie.

About sixty miles west of Ortonville you reach Waubay, S. D. A side trip of a few miles to the north will take you to famous fishing lakes where bass, pike and pickerel abound-Waubay, Blue Dog, Parker and Pickerel Lakes being the best. From here to Billings, Montana, there is no fishing to speak about, but from there all the way to Spokane, Washington, the fishing is excellent and especially so in the streams tributary to the main rivers.

Excellent fishing is found one and one-half miles south of Laurel, also six miles west of Reed Point and on the Boulder River south of Big Timber, Montana.

At the foot of every mountain and hill, at Livingston, is a ribbon of rippling, sparkling water, where the flashing fly of the angler is met with the dash of the rainbow, eastern brook and cut-throat trout. This is the sportsman's paradise, where the grandeur and beauties of nature are most perfect. You can camp in the wildest part of the mountains and yet be within a halfhour's walk of Livingston.

## YELLOWSTONE PARK.

With the exception of Yellowstone Lake and River, practically all the lakes and streams were destitute of fish life, before they were stocked by the United States Bureau of Fisheries. Since 1889 more than $15,000,000$ fry have been planted in the various streams and lakes; and in 1904 a fish hatchery was installed near the Lake Hotel on Yellowstone Lake.

If you tour the park, be sure to visit the hatchery, as it is a very instructive
sight. Today, practically all the streams and lakes are well-stocked and afford excellent sport for the angler.

The varieties consist of Rainbow, Eastern Brook, Cut-throat or native, Loch Leven and Von Behr, or brown, the latter from the famous Scotch lake and of unequalled excellence. The Rainbow and Loch Leven trout and the Grayling of the Madison River have made this section famous as an angler's paradise. It is not uncommon for an expert angler to land a six-pound Rainbow Trout in this vicinity, a sport to be fully appreciated only by experience. The best place to fish this stream is just outside the park in the Yellowstone Forest Reserve. No person is allowed to catch more than ten fish in one day in the park, and all fish under eight inches in length must be returned to the water. Only hook and line can be used, and no fishing license is required.

One-day fishing trips from Mammoth Hot Springs may be made by sad-dle-horse or on foot by good pedestrians as follows:

South on main road to Obsidian Creek, Indian Creek, Upper Gardiner and tributaries, and Glen Creek for small Eastern Brook Trout, distance being from four to ten miles. . . East to Lava Creek, five miles for Eastern Brook, or to Blacktail Creek, eight miles for small native and Rainbow Trout. . . East or northeast to the main Gardiner River for Cut-throat, Loch Leven and Eastern Brook trout.

The best fishing is, of course, in the streams farthest from the roads. The best fishing near the roads is in Yellowstone Lake and River, Firehole River, Madison River, Lamar Creek, Slough Creek and at the mouth of Tower Creek near Tower Fall.

The fish in Yellowstone Lake are not as game as those caught in the streams, and the auality is likely to be poor. Large Mackinaw Trout also inhabit Yel-
lowstone Lake. A fine fishing spot is at the bridge just below the outlet of the lake. Rowboats are available for hire. The fly-fishing is best after August 1st but in the higher portions of some of the streams it is excellent in July. Flies and tackle of all kinds can be bought or rented in the park. The flies generally used are the following: Black Gnat (early), Grizzly King, Professor, Brown Hackle, Cowdung, Royal Coachman, Parmacheene Belle, Queen of Waters, Silver Doctor and White Miller (for late evening).

## GLACIER PARK.

There is fine fishing in almost all the streams and lakes of the park. Indeed, the entire district, inside and outside the park, is a fishing country not visioned in dreams. Within the boundaries of Glacier Park are fishing spots probably never whipped by the line of the white man and perhaps not even by the redskin. There are hundreds of unexplored spots waiting for the fisherman and his rod. All species of trout have been planted in the stream and lakes of the park, in order to determine which are the most adaptable. Up to the present time the fish have done exceptionally well, owing to the abundant natural foods, and because the waters vary scarcely a degree in temperature the year around. The brush and woods adjacent to the lakes and streams, furnish an abundance of insects during the summer months and the microscopic life in the lakes is profuse. There are large numbers of insects whose larvae are aquatic, furnishing food in this manner. and the adult in the deposition of their eggs on the water are captured by the fish, or taken as they fall upon the surface. On the bottom of a good many lakes are also found fresh-water shrimp, on which the trout feed.

The varieties are Cut-throat (known as native or black snotted), Eastern Brook, Rainbow, Dolley Varden and

Mackinaw. The Cut-throat, Rainbow and Eastern Brook are the favorites of trout fishermen. All three are very game, very shy and at times require considerable ingenuity and coaxing on the part of the angler, but they strike quickly and are hard fighters. Many of them attain a weight of six pounds and are caught from waters first stocked in 1915.
purchased at Many Glacier Hotel, TwoMedicine Lake, St. Mary Chalets, Glacier Park Hotel and Glacier Hotel (Lewis') at head of Lake McDonald. Outfit rents for twenty-five cents per day. Rowboats are available for hire at these places. Rates are fifty cents per hour or two dollars and fifty cents per day of ten hours.


Cut-throat Trout caught at Lake McDermott, Glacier National Park.

Mackinaw Trout are found only in St. Mary Lake. They have been taken weighing thirty-five pounds; ten to fif-teen-pound Mackinaws are quite common. They are caught with a spoon or a combination of spoon and bait, by trolling in deep water, but occasionally may be caught with fly and tackle. In the park fish may be taken only with hook and line. All fish hooked less than six inches long must be carefully handled with moist hands and returned at once to the water. Ten fish, regardless of weight, constitute the limit for a day's catch. No license is required in the park. Fishing tackle consisting of rod, reel and line may be rented or

Two-Medicine Lake-famous for its Eastern Brook and Cut-throat Trout. Good fishing is also found in the TwoMedicine River below Trick Falls, and in the Lower Two-Medicine Lake. We whipped the stream below Trick Falls for nearly two hours late one afternoon, and never got a strike, so we went to Two-Medicine Lake and pitched camp. These lakes are supposed to be the best-stocked in the park, because of the proximity to the hatchery at the eastern entrance. We found the best fishing at the head of Two-Medicine Lake. A launch service is maintained on this lake and the fare to the head and return is seventy-five cents. Late
the next afternoon we fished the west end of the lake, near where the stream enters from Upper Two-Medicine Lake under the precipitous walls of Mt. Rockwell. There was a nice ripple on the water at the time. Using the White Miller and the Queen of the Water fly, which are very fine flies for late evening fishing, we caught twelve Eastern Brook and Eight Cut-throat trout inside of two hours. They bite very rapidly and are extremely game fighters.

St. Mary Lake. This is the home of the Mackinaw Trout, but also contains Cut-throat and Eastern Brook. The upper end of the lake is best, but they can be caught anywhere in the lake. Numerous tributary streams are wellstocked with fish and with fly or spinner a goodly toll may be taken.

Red Eagle Lake. This lake is easily accessible by trail. It is located eight miles southwest from St. Mary Chalets


Thoroughfare Connecting Lake Mc Dermott and Lake Josephine, Glacier National Park.

In all my experience I have never seen fish put up such a fight, pound for pound, as they do in Glacier Park. The cold water from the glaciers seems to enhance their vitality and develop their fighting instinct.

North Fork of Cut Bank Creek. Cutthroat inhabit this section, and the fisherman who wades the center of the stream and fishes with skill is sure of a well-filled creel. High waders are required to fish many of the streams and lakes of the park.
on the east side of Red Eagle Mountain. This is one of the best fishing spots in the park. To reach it you can use horses or go on foot. Here are Cutthroat, Rainbow and Dolly Varden Trout.

McDermott, Josephine and Grinnell Lakes. These lakes are situated near the Many Glacier Hotel, about fifty-five miles north of Glacier Park Station. These lakes are famous for their Cutthroat, Eastern Brook and Rainbow Trout. They are literally alive with them. They form a chain of glacier-
fed lakes, the water source being the melted snow and ice of Grennell Glacier. The trail from the Hotel which is situated at the lower end of Lake McDermott skirts the edges of the three lakes. A two-mile walk takes you to Josephine Lake and three miles southwest is Lake Grinnell, all being connected by streams. Discharging from the face of Grinnell Glacier, three large cataracts tumble their waters down the steep slope into the upper lake. These

We then decided to troll and after having used various spoons without success, changed to a "Mirror Spoon" which we had purchased in Spokane, Washington, several years previously, and used with considerable success in lakes tributary to that city. This proved a powerful killer. My son and I both trolled, and as he was manipulating the "Mirror Spoon" he caught all the fish, ten in number, averaging two pounds each, in aprroximately one hour's time,


Rainbow Trout caught by the Author in Lake Josephine, Glacier National Park.
lakes have a setting of mountain and forest and are remarkable for their beauty. During mid-day they look like mirrors set in emerald and gold.

We rented a boat at the hotel and fished Lake McDermott one evening, and on a "Queen of the Water" fly caught ten Cut-throat Trout in a very short time. They averaged two pounds each. Some of the auto campers had a good meal that evening.

The following morning we fly-fished for about an hour, but never got a rise.
besides losing several beauties. The man who had charge of the boat livery at the hotel, when shown the spoon, declared he had never seen one before. It consisted of broken pieces of mirror brazed on the concave surface of the spoon, the convexity being highly nickled. It can be bought from the Jensen King Bird Company, Spokane, Washington, the best size being No. 2 or No. 3.

The next day we fished Lake Josephine and using the "Mirror Spoon" and flies caught twenty Rainbow Trout av-
eraging over two pounds each, cleaned. These were all caught in one and onehalf hours. . . The fishing in Grinnell Lake is just as good, if not better. . . Truly, a Charmed Land for the auto camper!

Cracker Lake. This lake is seven miles by trail to the south of the hotel. The trail follows Canyon Creek to its

Sherburne Lake. This lake about seven miles east of Many Glacier Hotel is literally alive with Pike, Lake Superior Whitefish, Rainbow and Cutthroat Trout. Pike are readily taken with the spoon.

Lake McDonald. This lake is the gem of the west side of the Continental Divide, located in McDonald Valley. From


Black Bass caught at Williams Lake near Spokane, Washington.
source in Cracker Lake at the head of the canyon formed by the walls of Mt. Allen and Mt. Siyeh. The trail is a fascinating one, crossing and recrossing the turbulent twistings of Canyon Creek. The canyon ends abruptly at the highly colored perpendicular walls of Mt. Siyeh where farther progress is blocked. Forests grow to the very edge of the lake. Imagine such a beautiful setting while you are casting the fly and matching your skill against Eastern Brook and Cut-throat Trout in the stream and lake.
a rowboat you can try your luck with a fly casting rod, or by trolling with a spoon in the shadows of its wooded shores. Here rowboats and "Evinrude" motor boats can be secured.

Avalanche Lake, nine miles by trail to the northeast, and Trout Lake, eight miles to the northwest of Glacier Hotel, (Lewis') are two of the best trout lakes in the park, and may be flshed with fine results. Rates for guides and horses is $\$ 4.00$ per person if three or more go together.

There is excellent fishing in all the numerous lakes in the valleys north of Lake McDonald.

I have simply mentioned a few of the more easily accessible lakes in which to fish, but the fact remains that there are scores of other lakes and streams that are abundantly supplied with trout.
exciting; the stream is very swift and the trout very game.

The flies generally used are the Black Gnat, Professor, Brown and Gray Hackle, Royal Coachman, Queen of Waters, White Miller and Silver Doctor. The trout rise to the fly during June, July and August, July and August being the


Black Bass caught at Hayden Lake, Idaho.

There are no bass in the lakes of the park. The only bass lake that I know of, near the park, is situated a few miles west of Belton, called Granite Lake. Boatmen may also be hired for a fishing trip down the Middle Fork of the Flathead River as far as Columbia Falls. I assure you this would be very
best months. Early in June and in September, spinners with and without meat bait or salmon eggs are used. For trolling in the lakes, a "Mirror Spoon" and South Bend Flited Spoon (without feathers) No. 3, are perhaps the best, although Kewell-Stewart and Wilson may be used.

For the large Mackinaw, fasten considerable lead by means of an extra line about fifteen feet above the tackle and fish deep.

The park has streams full of crooks and turns, with eddies at every turn, and a hole that looks better than the last at every crook. They are ideal for the man who cares not for getting wet -with overhanging foliage and buried

Badger, Fishtrap, Newman and Hauser. No better Bass lakes are to be found anywhere. Live minnows are the best for bait, but fine catches are made with the "Yellow Tango" and "Wilson's Fluted Wobbler".

Deer Lake and Loon Lake, north of Spokane, contain Bass, Perch and Mackinaw Trout. Mackinaws have been caught weighing thirty-five pounds.


Richard Klussman Richard Hall Black Bass caught at head of Coeur d'Alene Lake, Idaho.
snags to conceal the vigilant trout, this is a fisherman's delight.

Spokane, Washington. Within a few hours ride from the city are innumerable streams and lakes filled with Eastern Brook, Cut-throat, Rainbow and Mackinaw Trout. Transplanted fisn such as the big-mouth Black Bass, Perch and Crappie thrive wonderfully in these lakes, and when found in the same waters that provide excellent trout fishing, a genuine paradise for fishermen has been found. Some of the lakes in the immediate vicinity containing bass and Perch are Williams,

The Spokane River, Little Spokane and Deadman Creek afford Cut-throat and Eastern Brook Trout fishing.

Coeur d'Alene, Idaho. The tourist with sporting proclivities in his blood would do well to linger here a while. Eight miles to the north is Hayden Lake, well-stocked with Cut-throat Trout, Black Bass and Perch. The lake is wooded to its shores and is one of the most delightful lakes in the county. Rowboats and minnóws are available.

Twenty miles to the south at the head of Coeur d'Alene Lake is found
excellent bass fishing. Here also, within a stone's throw of the St. Joe River, which empties into the lake, are located Chatcolet Lake and Round Lake, which are literally alive with Bass and Perch.

Several steamers leave Coeur d'Alene mornings and late afternoon, for Chatcolet. This is one of my favorite fishing grounds, and many times have I returned with the limit.


Cut-throat Trout caught by Author near Coeur d'Alene, Idaho.

## DISTINCTION BETWEEN

## NATIONAL FORESTS AND NATIONAL PARKS

Many persons do not realize the difference between a National Forest and a National Park.

A National Forest Reserve is primarily used for saw-mills and cattlegrazing, while a National Park is a region wholly educational and recreational for your children and yourselves. The National Forest Reservations are set apart for economic ends-it is a commercial proposition. They are great natural laboratories wherein are demonstrated on a large scale, the interesting principles of scientific forestry. But reforesting of denuded watersheds, fire protection, regulated cutting of timber and grazing of live-stock are not permitted to interfere with the development of their unlimited facilities for the recreation of the tourist, the camper and sportsman.

The camper is free to pitch his tent where he may choose and stay as long as he likes. Tourists are required to completely extinguish their campfires before leaving, and maintain sanitary camp grounds. Fish, birds and big game may be taken in these forests during the open season, but a license is required. The National Forests are in charge of the United States Forest Service, a Division of the Department of Agriculture.

A National Park is an open-air museum set apart by Congress to preserve scenery, trees and nature's handiwork exactly as nature made it, and dedicated as a playground for the people. The idea is not commercial development along even conservative and constructive lines, but absolute preservation in a state of nature. No tree is cut excent to make way for road, trail or hotel to enable the visitor to
penetrate and live among nature's secrets. In National Parks the game is protected and hunting is strictly prohibited at all times, but fishing is permitted without a license during the park season.

Another distinction which should be made is the difference between National Parks and National Monuments. The National Park is created by Congress upon the assumption that it is a supreme example of its kind and with the purpose of developing it for the occupancy and enjoyment of the public. . . . The National Monument is made by presidential proclamation to conserve an area or object of historical, ethnological or scientific interest. It is a scenic and educational reservation.

All National Parks and National Monuments are in charge of the National Park Service, a Division of the Department of the Interior.

Losses from forest fires are enormous. Directly or indirectly every citizen bears part of the loss and should, therefore, interest himself in reducing the damage. You can do so by being careful with fire yourself, and warning others to be careful in the woods. Forest fires also ruin fishing and hunting, and destroy all the attractiveness of the country for the camper and nature lover.

Don't throw away lighted matches, cigars. cigarettes, or knock the heel out of a pipe near inflamable material. Don't start fires in improper places, and above all things, thoroughly put out your fire, -be sure that there is not a spark left.

Remember, if you desire you can, for a small fee, secure a permit for a term of years to build a summer home
on a specified piece of ground in the Forest Reserve. The length of this lease can be for as long as thirty years, but not for more. When this term-permit expires, the holder is the preferred person in reissuing the permit. No title to land passes to the permittee in this transaction. He may, however, sell his property, which is in the form of buildings and similar improvements, at any time, and the permit is then transferred to the new owner.

From Glacier Park we started on our long journey home, a distance of 2,150 miles, to Toledo, Ohio. So at last the West began to slip behind us. There is little of the "wild and woolly" west left. The trader and trapper-the pioneers of the old West have vanished.

Irrigation, wheat, the parcelling out of the Indian Reservations into allotments, the homesteads, the devastated forests, all spell the doom of the most picturesque period of American development. The cow puncher in his gorgeous chaps, the large cattle and sheep ranches, the pack train winding its devious way along the trail, the trail itself, and the Indians, as well as the wild game, are almost a thing of the past.

Just east of the park we passed through the Blackfeet Indian Reservation. The quaint names of the mountains and lakes of Glacier Park were bestowed on them by these Indians, to whom the region once belonged.

While passing along we noticed how horses stood in pairs, from force of habit, head to tail, leaning their necks across each other's flanks, from reminiscence of the preceding cold winter, or perhaps in anticipation of the next.

We traveled east over the Custer Bat.. tlefield Highway, passing through Browning, Chouteau, Great Falls and Lewistown to Roundup. Between Great Falls and Lewistown the route passed through a great wheat country where
dry farming is extensively practiced, although considerable alfalfa is grown in the valleys where irrigation is available. This year the wheat crop only averaged about seven bushels per acre, due to the large swarms of grasshoppers devastating the crop. We accumulated about two bushels of grasshoppers in our machine, during the drive of some three hours through this region.

Montana's prosperity lies in the wonderful natural resources of the State. The essential industries are mining, lumbering in the western part, stock raising and agriculture, but oil and gas, of which Lewistcwn and Roundup are the logical centers, are destined from now on to occupy a greater amount of attention than the other mineral resources of the State. Lewistown has oil refineries, and the Cat Creek oil district, one of the largest in Montana, is located a short distance east of the city.

At Roundup we deserted the Custer Battlefield Highway and toured by way of the Electric Highway, one of the best State Highways in Montana, passing through Mussel Shell and Thebes to Forsythe, where we connected with and continued our trip over the Yellowstone Trail and the National Parks Highway to Fallon, Montana, where they diverge.

Between Mussel Shell and Melstone, for miles along the road we saw countless numbers of sage-hens, this being a wonderful hunting country.

Leaving Fallon we traveled east over the National Parks Highway, by way of Glendive, Bismarck, Fargo and St. Cloud to Minneapolis and St. Paul.

At Glendive they have a tourist camp with all modern conveniences, besides having an immense out-door swimming pool. After passing through Sentinel Butte, flfty miles east of Glendive, we entered the Bad Lands of North Da-
kota, a bewildering maze of eroded hills and buttes, of fanciful shape and coloring. The view here is more wonderful than the view had been over the Yellowstone Trail farther south. The roads through the Bad Lands were excellent and we made good time.

Just east of Medora, in the heart of the Bad Lands, we crossed a bridge over the Little Missouri. Nearby was located the famous Theodore Roosevelt Ranch.

From Mandan to Bismarck the Missouri River must be crossed by ferry.

After leaving Bismarck we passed through the great "wheat belt" of North Dakota and Minnesota, and soon arrived in Minneapolis.

Passing through St. Paul, we continued southeast by way of Hastings and Rochester to LaCrosse, Wisconsin. At Rochester is located the world-famous Mayo Surgical Clinic.

LaCrosse is located on the east side of the Mississippi River, and in order to reach it from the bluff on the west side, we had to descend a steep grade winding and twisting around the hill-
side for quite a distance before reaching bottom. Here compression should be utilized. After passing through LaCrosse, we followed a steep grade up a canyon, skirting along the edge of a picturesque stream for several miles, and soon reached the top of the bluff on the east side. The thirty mile drive from LaCrosse to Viroqua was the most delightful, from a scenic standpoint, that we passed over since leaving Glacier Park. Mile after mile the road wound up and down hills covered with dense hardwood timber, and crossed numerous beautiful valleys where much tobacco is grown.

From Viroqua we drove to Madison, where we left the National Parks Highway, taking a short cut through Elkhorn to Chicago, arriving in Toledo, Ohio, two days later, concluding our trip which covered over seven thousand miles.

And so the Trail-after having wound over crooked and alluring highways, ever intimate with the vast open spaces, the forests, mountains and streamsended, as it always does, in a definite place-in this case, at home.

## THE COST

Perhaps the tourist would like to know what such a trip costs. Before leaving Toledo, I had the engine tuned up, oil changed and brakes re-lined. Our camp equipment complete cost us approximately $\$ 300.00$. We started with a set of new Goodyear Cord Tires, which cost about $\$ 200.00$, and which have covered 3,000 miles since our return. The speedometer registered $7,000 \mathrm{miles}$, including all side trips. Gasoline for the complete trip cost $\$ 186.50$, oil and grease $\$ 25.00$, repairs $\$ 30.00$.

Food for five adults for three months cost $\$ 170.00$. The low cost of food was probably due to some extent to the large number of fish caught in the West.

Entrance fees to Parks, shipping automobile from Belton to Glacier Park Station, rowboats and incidentals perhaps cost about $\$ 100.00$.

The entire trip, including the stay
of several weeks at our summer home on Coeur d'Alene, Idaho, cost a total of \$1,011.50.

Take it from me, you will never regret the time and money spent on this trip, through "America's Wonderland". If you are a student of geology or botany, a photographer of wild animals, a persistent fisherman or merely a lover of freedom and adventure, you will find that which you seek in the West. It holds more marvels, more beauties, more surprises, than any other in the world. Here are streams and expansive lakes, where there are abundant camp sites, an inexhaustable wood supply and pure ice-cold water that may be drunk without hesitation, wherever you may happen to be.

At last I feel how inadequately I have described the West; how adequately, you will know when you make the trip.

## RETURN TO:

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ALL BOOKS MAY BE RECALLED AFTER 7 DAYS. Please return books early if they are not being used.

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